

## Dan Wesson Model 7414 SuperMag



*The Dan Wesson company is back under new ownership. We recently received a sample of its Model 7414-VH8 SuperMag, a .414 SuperMag, double-action revolver featuring interchangeable, heavy barrels with ventilated ribs.*

In 1968, Daniel B. Wesson founded a new firearms company called Dan Wesson Arms. As a perfectionist, Wesson's goal was to build the finest revolvers the shooting world had ever seen. To achieve that, Wesson followed a philosophy of "You can never be fully satisfied. You can always make something better." In 1991, Dan Wesson Arms was purchased and reorganized as the Wesson Firearms Co., Inc. by the fifth generation of Wessons, Seth K. and Carol S. They continued the family tradition of quality, service and inventiveness that had built a dedicated following of handgun hunters and silhouette shooters. Another change in company owner-

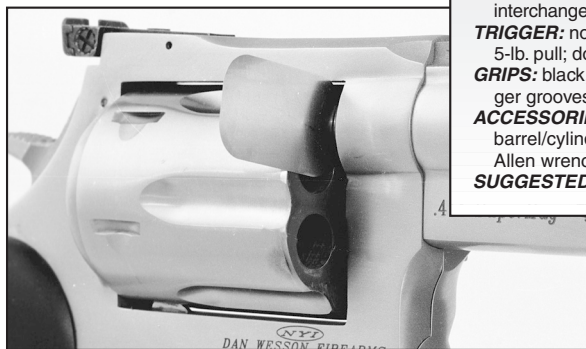
port machinery. After building new tooling and developing new processes for the horizontal machining centers, the first new-generation Dan Wesson revolvers were shipped in December 1997. Now, there are several models of the guns. We recently received an example of the Model 7414 SuperMag for test and evaluation.

Several prominent Dan Wesson features are retained on the new generation of revolvers. Most noticeable is the interchangeable barrel system that allows the shooter to quickly and easily install a 4", 6", 8" or 10" barrel. Heavy barrels with ventilated ribs or integral compensators are offered, and barrel assemblies made at any point in Dan Wesson revolver history will fit the new-generation guns. Unlike early Dan Wesson revolvers of the 1960s that had a large, exposed nut at the muzzle to secure the barrel, new-generation guns have a hidden nut that seats flush with the end of the barrel shroud. Consistent cylinder-to-barrel gap is ensured by using the provided feeler gauge when changing barrels. Complete instructions and tools are included with each revolver.

Also carried over is the forward-mounted cylinder latch that is pressed downward to release the cylinder. This arrangement locks the cylinder at its front, which is claimed to improve shot-to-shot cylinder/barrel alignment. Additional locking is provided by a spring-loaded detent ball in the breech face that engages a circular recess in the center of the star extractor.

### MODEL 7414-VH8

**MANUFACTURER:** Dan Wesson New York Int'l Corp. (Dept. AR), 119 Kemper Lane, Norwich, NY 13815; (607) 336-1174  
**CALIBER:** .414 SuperMag  
**ACTION TYPE:** double-action revolver with front locking latch  
**CONSTRUCTION:** stainless steel  
**FINISH:** polished, natural stainless steel  
**OVERALL LENGTH:** 13 $\frac{7}{8}$ "  
**BARREL:** 4", 6", 8" (tested), 10" heavy, ventilated, interchangeable by shooter  
**RIFLING:** six-groove, RH twist  
**WIDTH:** 1 $\frac{5}{8}$ "  
**HEIGHT:** 6 $\frac{1}{4}$ "  
**WEIGHT EMPTY:** 74 ozs (with 6" compensated barrel)  
**SIGHTS:** square-notch rear with white outline, click-adjustable for windage and elevation; serrated, ramped front with interchangeable, colored plastic inserts  
**TRIGGER:** non-adjustable: single-action 5-lb. pull; double-action 14-lb. pull  
**GRIPS:** black, rubber monostock with finger grooves  
**ACCESSORIES:** barrel wrench, barrel/cylinder gap gauge, Allen wrenches  
**SUGGESTED RETAIL PRICE:** \$929



*Consistent cylinder-to-barrel gap is ensured by using the provided feeler gauge when switching barrels. Complete instructions and tools for changing barrels are included with each revolver.*

ship occurred in 1996 when the company was purchased by Dan Wesson revolver enthusiast Robert W. Serva, who moved the operation from Palmer, Mass., to upstate New York. Rather than retain the old Wesson manufacturing machinery and processes, Serva invested in a battery of new CNC equipment and sup-

The *American Rifleman* has used the phrase "Dope Bag" at least since 1921, when Col. Townsend Whelen first titled his column with it. Even then, it had been in use for years, referring to a sack used by target shooters to hold ammunition and accessories on the firing line. "Sight dope" also was a traditional marksman's term for sight adjustment information, while judging wind speed and direction was called "doping the wind."

**WARNING:** Technical data and information contained herein are intended to provide information based on the limited experience of individuals under specific conditions and circumstances. They do not detail the comprehensive training procedures, techniques and safety precautions absolutely necessary to properly carry on similar activity. Read the notice and disclaimer on the contents page. Always consult comprehensive reference manuals and bulletins for details of proper training requirements, procedures, techniques and safety precautions before attempting any similar activity.

## SHOOTING RESULTS

| .414 SuperMag Cartridge        | Vel. @ 15' (f.p.s.) | Energy (ft.-lbs) | Recoil (ft.-lbs) | Smallest (ins.) | Largest (ins.) | Average (ins.) |
|--------------------------------|---------------------|------------------|------------------|-----------------|----------------|----------------|
| Dan Wesson 220-gr. JFP         | 1310 Avg.<br>36 Sd  | 838              | 9.3              | 1.61            | 2.15           | 1.92           |
| Dan Wesson 170-gr. JHP         | 1497 Avg.<br>35 Sd  | 845              | 7.7              | 1.27            | 2.30           | 1.67           |
| Winchester 175-gr. ST .41 Mag. | 1226 Avg.<br>12 Sd  | 584              | 5.6              | 1.87            | 2.67           | 2.23           |
| Average Extreme Spread:        |                     |                  |                  |                 |                | 1.94           |

Measured average velocity for 10 rounds from an 8" barrel. Range temperature: 66° F. Humidity: 34%. Accuracy for five consecutive, five-shot groups at 25 yds. from a sandbag. Abbreviations: JFP (jacketed flat-point), JHP (jacketed hollow-point), Sd (standard deviation), ST (Silvertip)

### 6" COMPENSATED BARREL VELOCITY

|                                  |           |
|----------------------------------|-----------|
| Dan Wesson 220-gr. JFP           | 1238 Avg. |
| Dan Wesson 170-gr. JHP           | 1518 Avg. |
| Winchester 175-gr. ST (.41 Mag.) | 1232 Avg. |

Another retained feature is the method of grip attachment to a cylindrical frame stud. The one-piece, rubber Hogue stock with finger grooves is removed quickly by simply turning out a single Allen screw in the base of the grip.

The trigger is wide and smooth for comfortable shooting, while the long hammer spur is heavily checked for improved thumb purchase should the revolver be fired single action. An adjustable trigger stop in the rear of the trigger guard regulates overtravel. The firing pin is frame-mounted and separated from contact with the hammer by a transfer bar that allows the revolver to fire only when the trigger is pulled.

Our sample Dan Wesson 414 was specifically a Model 7414-VH8 chambered for the .414 SuperMag cartridge. The prefix "7" indicates that the gun is stainless steel instead of blued, "VH" designates ventilated heavy barrel, while the last digit, "8," is the barrel

rels. Accuracy and velocity results are shown in the accompanying tables. Clearly, barrel length affected velocity, though in the case of the light bullets, velocity increased slightly as barrel length decreased. Function firing was with the compensated barrel and included both .414 SuperMag loads offered by Dan Wesson as well as standard .41 Mag. loads. Shooters can use .41 Mag. loads in a revolver chambered for .414 SuperMag much as .38 Spl. cartridges can be used in a gun chambered for .357 Mag. There were no malfunctions of any kind and, as with all previous Dan Wesson revolvers tested here, accuracy was good, which is indicative of why this brand has a following among handgun silhouette shooters.

A few words about the .414 SuperMag cartridge are in order as it is probably unknown to most readers. Essentially, the .414 SuperMag is a slightly lengthened .41 Mag., much like the .357 Maximum is a lengthened .357 Mag. The lengthened case provides more space for larger powder charges for higher velocities. Currently, Dan Wesson is the only source for loaded .414 SuperMag ammunition, and two loads are offered. The first load uses a 170-gr. jacketed hollow-point bullet at an advertised velocity of 1600 f.p.s., which is considerably faster than Winchester's 175-gr. Silvertip .41 Mag. factory load at 1250 f.p.s. Dan Wesson's other .414 SuperMag load fires a 220-gr. flat-point jacketed bullet at a claimed 1300 f.p.s. The only .41 Mag. factory load close enough for comparison is



*Though the current-generation Dan Wesson revolvers are made on entirely new CNC machinery, interchangeable barrels made at any point in the company's history will fit.*

Federal's 250-gr. CastCore load at 1250 f.p.s. Clearly, the lengthened case offers potential for higher velocities, though at present, the increase with heavy bullets would appear marginal.

Will the new Dan Wesson company continue the tradition of quality, service and inventiveness? Our sample revolver clearly shows a commitment to quality. With increased production capability afforded by the new tooling, service should be good, too. As for inventiveness, the new Dan Wesson already has working prototypes of an M1911-style semi-auto pistol called the "Point Man" and the company is considering producing a Dan Wesson rifle.



*The Dan Wesson's front-mounted cylinder latch is claimed to improve cylinder/barrel alignment from shot to shot. Its release is pressed downward to open.*



*Wesson's proprietary .414 SuperMag cartridge may be new to many readers. Essentially, the cartridge is a lengthened .41 Mag., much like the .357 Maximum is a lengthened .357 Mag.*

length in inches. Barrels for the Model 414 can be had in lengths ranging from 4" to 10", and all are heavy contour with a ventilated rib. The rib on our 8" barrel came drilled and tapped for a scope mount. The drill and tap is a \$35 factory option. We also received a 6" compensated barrel—a \$239 option. As compensated Dan Wesson barrels have an expansion chamber between the end of the barrel proper and the muzzle, an extended spanner long enough to reach deep inside the shroud to remove the barrel locking nut is provided with each compensated barrel.

For accuracy testing, we equipped the Dan Wesson Model 7414 with the 8" heavy barrel and a Tasco 4x28 mm handgun scope. Later, the 6", compensated, heavy barrel was installed so that we could compare velocity difference between bar-

## Stevens Favorite Model 30G

*Over the course of its production, many and varied versions of the Favorite were made. The new Model 30G doesn't exactly copy any of the earlier versions, but combines their improvements with some of its own.*

Savage Arms has brought back a favorite—literally—with the Stevens Favorite Model 30G, a single-shot, .22 rimfire rifle. Production estimates range from approximately 500,000 to 1 million Favorite rifles made during its production heyday from the early 1890s to the late 1930s. An additional 10,000 Savage Model 71 “Stevens Favorite” rifles were issued in 1971 as a tribute to the guns’ inventor, Joshua Stevens. Over the course of that production period, many and varied versions of the Favorite were made.

The new Model 30G does not copy exactly any of the earlier versions, but rather combines the Favorite’s progression of improvements into a trim little rifle simpler than any Favorite previously made. Take for example that original Favorites were made as take-down rifles while the

new Model 30G is not, and that the new gun has a total of 22 action parts—three fewer than the original—while incorporating safety improvements such as an inertial firing pin and firing pin spring.

Borrowing heavily from Frank DeHaas’ *Single Shot Rifles and Actions*, let’s look at the Favorite’s progression of improvements as they pertain to the new Model 30G. Like the earliest Favorites, the Model 30G has a half-round half-octagon barrel. While originals had flats only on the top half, the Model 30G is octagonal the full circumference of its 21” blued steel barrel.

Various forms of extractors have been used on Favorite rifles



*Savage’s new Stevens Favorite is much simpler than any previous version of the Favorite. Take, for example, that the new gun has a total of 22 action parts—three fewer than the original—while incorporating safety improvements such as an inertial firing pin with firing pin spring.*

ranging from the earliest, located in the left side of the frame, to a post-1904 centrally located, automatic extractor. The Model 30G uses an extractor arrangement that appeared originally in the Favorite about 1901. It is centrally located and extracts the case about 1/4” from the chamber.

In 1915, the Favorite rifle experienced a major revision in its action. Changes consisted of making the action heavier, flatten-



*Often called a “falling block” action, the Favorite is technically a “swinging block” in that the top of the block pivots down when the operating lever is lowered.*

ing the top of the breech block and using a coil mainspring instead of a breakage-prone flat one. Our sample’s action is visibly larger than that of an early Favorite on display in the National Firearms Museum, but retains the scalloped breech block of the pre-1915 rifle.

The new Model 30G also has a much-simplified version of the post-1915 coil mainspring. Original post-1915 coil mainspring assemblies were an over-engineered collection of six parts pinned to the underside of the hammer at one end, and wedged against a screw turned into the lower tang at the other. Only two parts make up the current mainspring assembly—a coil spring and a strut. A ball head on one end of the strut rests against the bottom of the hammer, while the rear of the coil spring seats in a circular recess in the bottom of the action body. This circular recess has a small hole in its center going all the way through the action body out of which the strut protrudes slightly when the hammer is cocked.

The 1971 special edition Favorite incorporated several design changes in its own right. A stock throughbolt replaced tang screws; the pressed-in barrel was further secured by a cross-pin; the fore-end had a schnabel tip; a safety pin-styled ham-

### STEVENS FAVORITE

**MANUFACTURER:** Savage Arms/  
Savage Range Systems, Inc.  
(Dept. AR), 100 Springdale Road,  
Westfield, MA 01085; (413) 568-7001

**CALIBER:** .22 Long Rifle

**ACTION TYPE:** swinging block, single-shot rifle

**RECEIVER:** carbon steel

**FINISH:** blued steel

**OVERALL LENGTH:** 36¾”

**BARREL:** half-octagon/half-round 21”

**RIFLING:** conventional, eight-groove  
1:16” RH-twist

**WEIGHT:** 4½ lbs.

**SIGHTS:** steel, round notch, blade rear  
with stepped elevator; bead on post front

**TRIGGER:** single-stage, non-adjustable,  
5-lb. pull

**STOCK:** oil-finished, American walnut  
with straight grip and schnabel fore-  
end tip; length of pull, 13”; drop at  
heel, 2¾”; drop at comb, 1”

**ACCESSORIES:** lever hammer lock  
**SUGGESTED RETAIL PRICE:** \$180

## SHOOTING RESULTS

| .22 Long Rifle Cartridge   | Vel. @ 15' (f.p.s.) | Energy (ft.-lbs.) | Recoil (ft.-lbs.) | Smallest (ins.) | Largest (ins.) | Average (ins.) |
|--|---------------------|-------------------|-------------------|-----------------|----------------|----------------|
| Federal 712 38-gr. HP  | 1206 Avg. 27 Sd     | 123               | 0.2               | 1.61            | 2.81           | 2.14           |
| Remington Hi-Speed 38-gr. HP   | 1176 Avg. 24 Sd     | 117               | 0.2               | 2.18            | 3.92           | 3.04           |
| Winchester X22LR 40-gr. SP   | 1126 Avg. 6 Sd      | 113               | 0.2               | 2.35            | 3.90           | 3.09           |
| Average Extreme Spread:  |                     |                   |                   |                 |                | 2.76           |
| Measured average velocity for 10 rounds from a 21" barrel. Range temperature: 70° F. Humidity: 84%. Accuracy for five consecutive, 10-shot groups at 50 yds. from a sandbag. Abbreviations: HP (hollow-point), Sd (standard deviation), SP (solid-point) |                     |                   |                   |                 |                |                |

mer return spring was used in lieu of a flat one; an inertia-type, rebounding firing pin replaced the solid, non-rebounding one and a hammer block prevented the hammer from striking the firing pin unless the trigger was pulled. All those improvements are found in the Model 30G, except for the hammer block, which has been omitted. Even without the hammer block, it appears unlikely that the Model 30G can fire unless the hammer is at full cock and the trigger is pulled. "Safe" position is with the hammer down fully on the breech block. Even in that position, the firing pin is not in contact with the cartridge so a blow to the hammer should not result in a discharge. An intercept notch activates after the hammer is cocked about 1/4" to catch the hammer should it slip from your grasp during cocking. In the 1/4" of travel prior to activation of the hammer intercept notch, the mainspring is insufficiently compressed to fire a cartridge. Indeed we attempted to induce a discharge by repeatedly letting the ham-

mer slip from our thumb prior to reaching the intercept. We could not get a cartridge to fire. With the hammer in the intercept notch, a pull on the trigger will allow the hammer to fall with considerable force. We again attempted to induce a discharge by repeatedly firing the Model 30G from the intercept notch position. Again, we could not cause the rifle to fire.

Often called a "falling block" action, the Favorite is technically a "swinging block" in that the top of the block pivots down when the lever is lowered. To load the Model 30G, first make sure the hammer is in the fully down position. Next, fully lower the operating lever to expose the chamber. Insert a cartridge until it contacts the extractor, then raise the lever to close the action. With the rifle pointed downrange, fully cock the hammer. The Model 30G is now cocked, and pulling the trigger will cause the gun to fire.

We test fired the Savage Stevens Favorite Model 30G for accuracy at 50 yds. with

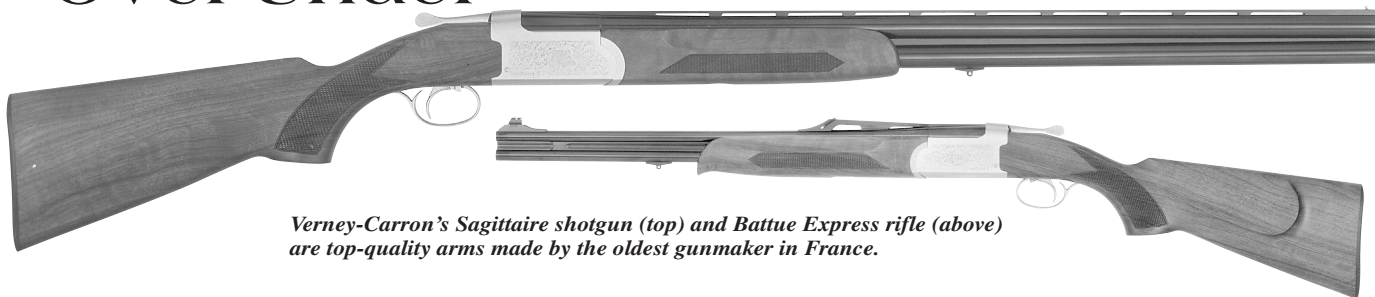
Federal and Winchester ammunition. For nostalgia's sake we also included an early box of Remington Hi-Speed Kleanbore ammunition. Savage Arms is clear that the Model 30G is for .22 Long Rifle only, so we did not test the gun with Longs or Shorts. As expected, there were no malfunctions of any kind and accuracy was as we'd expect from a .22 Long Rifle, open-sighted single-shot.

While we found the hammer on our test rifle rather difficult to cock, the trigger was much easier to manipulate with a pull weight much lighter and smoother than we expected. Fit and finish on our sample was utilitarian. While the stock was an excellent piece of straight-grained, satin-finished walnut, wood-to-metal fit was mediocre. Indeed, light was visible around the tangs when the Model 30G was held up to a strong light. Metal finish is not spectacular, either. Several casting seams and tool marks were evident, though the sides of the action were nicely finished in satin blue.

At the time of its introduction, a Stevens Favorite could be had for about \$6, and a thousand rounds of .22 Long Rifle ammunition cost \$2.85. Today, the same amount of ammunition is about \$22, or 7½ times greater, while the cost of the new Favorite Model 30G is about 30 times more. While the little rifle is a good value, we would like to have seen more attention given to fit and finish on the Stevens Favorite Model 30G.



## Verney-Carron Sagittaire N.T. Over-Under



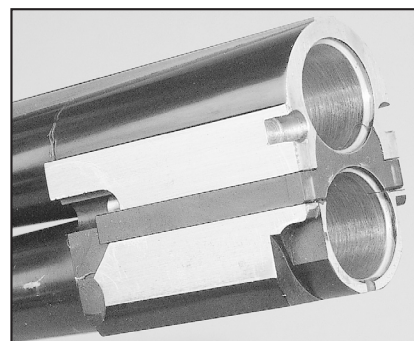
*Verney-Carron's Sagittaire shotgun (top) and Battue Express rifle (above) are top-quality arms made by the oldest gunmaker in France.*

As the oldest gunmaker in France, Verney-Carron is no newcomer to the firearms business. It prides itself on craftsmanship and quality as well as the fact that it makes the entire gun including barrel, receiver, operational mechanism and stock. Although a small company, it offers a full line of over-under, side-by-side, pump-action and semi-auto shotguns. We received an example of the Sagittaire Nouvelle Technologie (N.T.) over-under two-barrel set for test and evaluation. The shotgun barrels were 28" choked improved modified in the upper bar-

rel and improved cylinder in the lower barrel. A second set of barrels converts the Sagittaire into an over-under Double Express rifle with both barrels in 9.3x74R mm (see sidebar).

While most over-unders employ hammers impacting on separate firing pins, the Sagittaire is a hammerless design with two coil-spring-powered strikers in line with the bore axis much like the firing pins of

*The Sagittaire's barrels are closer together than those of other over-under shotguns, which results in a more compact gun.*



center-fire rifles. This significantly reduces lock time, which in turn reduces the required lead on moving game. As insufficient lead is the major cause of missed shots for most hunters, the Sagittaire striker system offers a significant advantage. Verney-Carron also claims its striker system eliminates any risk of misfires.

Locking is accomplished by two retractable steel pins—one on each side of the standing breech at approximately the midpoint between the strikers. The pins lock into recesses cut into the sides of the monobloc. There are no under lugs on the monobloc and no top lock on the receiver. The bottom of the forged receiver is solid with a tasteful curve on both inner and outer surfaces. A small notch on the bottom, outer edge of the under barrel and cutouts on both sides of the lower monobloc provide a path of escape for high-pressure gases in the unlikely event of a failed case head. The gas is then exhausted through two circular holes in the breech face into the receiver.



## VERNEY-CARRON

**MANUFACTURER:** Verney-Carron, 54 Boulevard Thiers, 42002 St. Etienne Cedex 1, France  
**IMPORTER:** The Graystone Group (Dept. AR), 3627 North Wilton Ave., Chicago, IL 60613-4312; (773) 525-2346  
**GAUGE:** 12, 2 $\frac{1}{2}$ " (tested); 12-ga., 3"; 20-ga., 3"  
**ACTION TYPE:** break-open, hammerless, over-under shotgun  
**RECEIVER:** forged aluminum alloy or forged steel  
**FINISH:** old silver with moderate engraving on sides and bottom of receiver and on fore-end; old silver on top lever, trigger and trigger guard; blued barrels and rib  
**OVERALL LENGTH:** 44 $\frac{1}{2}$ "  
**BARRELS:** hammer-forged, chrome-lined, carbon steel, 26", 28" (tested) or 30"  
**CHOKE SYSTEM:** fixed; improved cylinder; improved modified  
**TRIGGER:** single, non-selective (tested), 4 $\frac{1}{2}$ -lb. pull  
**WEIGHT:** shotgun: 6 lbs. (aluminum receiver); 6 lbs. 9 ozs. (steel receiver)  
**STOCK:** French walnut with semi-gloss varnish finish; length of pull, 14 $\frac{1}{4}$ "; drop at heel, 2 $\frac{1}{2}$ "; drop at comb, 1 $\frac{1}{8}$ "  
**ACCESSORIES:** optional at extra cost; automatic ejectors, left-hand stock, extra barrel sets, fitted luggage case  
**SUGGESTED RETAIL PRICE:** 12-ga. Premier with extractor, \$1,275 (12-ga.).

A hole parallel to the bore axis in the bottom of the receiver holds a spring-loaded cocking pin that is pressed rearward when the barrels are broken open. This pin causes a steel cocking arm to pivot rearward inside the breech to recock the strikers, which are held by sears. Strikers and side locking pins allow the inside height of the Sagittaire's standing breech to be substantially lower than many hammer-powered, under lug locking systems.

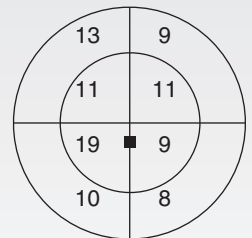
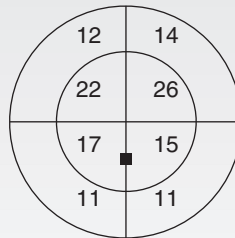
On the Sagittaire model we tested with a single, non-selective trigger (many other options are offered), a pivoting weight held forward by a spring-loaded sear disconnected the upper barrel until the lower barrel had been fired.

When the lower barrel is fired, the weight pivots rearward under inertia and the spring-loaded retaining sear drops out of contact, which allows the weight to fly fully forward under spring pressure. The upper barrel is then enabled by a cam surface on the bottom of the lever contacting the trigger. Pulling the trigger again releases the upper sear and striker firing the upper barrel. A pivoting safety lever on the bottom of the receiver inside the trigger guard blocks the trigger. The whole system is impressively simple, robust and well-engineered.

With 28" barrels, a 12-ga. Sagittaire shotgun weighs just over 6 lbs. with a balance point under the center of the receiver. This light weight is made possible by using a forged aluminum alloy receiver. For combination guns, double rifles and "Gros Gibier" 3" rifle-slug guns, a forged steel receiver weighing about 10 ozs. more than the aluminum version is used. Barrels are hammer-forged from chrome-moly steel with bores and chambers chrome-lined. Both the mid rib between the barrels

## SHOOTING RESULTS

AVERAGE OF 10 PATTERNS AT 40 YDS.



Improved Cylinder Barrel Improved Modified Barrel

■=Point of Hold

Federal P128 Premium Field Load—12-ga.

2 $\frac{1}{2}$ "—1 $\frac{1}{2}$  oz.—No. 6 lead

Average Pellet count—253

Measured Velocity @3-ft.—1368 f.p.s.

Remaining Energy Per Pellet @40 yds.: 2 ft.-lbs

Recoil: 33.1 ft.-lbs

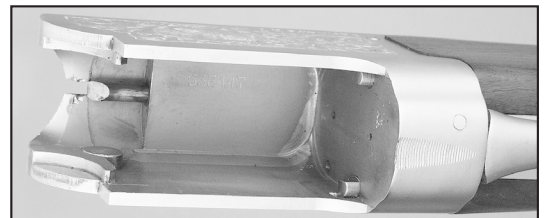
|                  |           |                  |          |
|------------------|-----------|------------------|----------|
| Total Hits       | 128 (51%) | Total Hits       | 81 (32%) |
| 21" Inner Circle | 80 (32%)  | 21" Inner Circle | 41 (16%) |
| 30" Outer Ring   | 48 (19%)  | 30" Outer Ring   | 40 (16%) |



*Unlike other over-under shotguns, the Sagittaire firing system employs a hammerless design with coil spring powered strikers much like a center fire rifle. The design considerably reduces lock time, shortening leads on flying game.*

and the steel, ventilated top rib are silver-soldered in place. Because of the close proximity of the barrels to each other, screw-in choke tubes are not offered in the Sagittaire. Verney-Carron does, however, offer a wide variety of fixed choke combinations. A single, robust extractor between the barrels lifts the cartridges from both chambers simultaneously. Automatic ejectors are an extra-cost option, but were not present on our test gun.

The stock and fore-end of the Sagittaire are of high-grade, French walnut with a semi-gloss finish and diamond-pattern, cut checkering of 16 lines per inch. The



*The Sagittaire's forged aluminum receiver has a solid bottom and is lower than those of other over-under shotguns. The design results in an overall lighter, more compact gun—something hunters will appreciate after a long day in the field.*

## SHOOTING RESULTS

| 9.3x74R mm Cartridge    | Vel. @ 15' (f.p.s.) | Energy (ft.-lbs.) | Recoil (ft.-lbs.) | Smallest (ins.) | Largest (ins.) | Average (ins.) |
|-------------------------|---------------------|-------------------|-------------------|-----------------|----------------|----------------|
| Hirtenberger 270-gr. SP | 2221 50 Sd          | 2959              | 26.9              | 1.04            | 1.35           | 1.20           |


Measured average velocity for 10 rounds from a 22" barrel. Range temperature: 61° F. Humidity: 32% Accuracy for five consecutive, five-shot groups at 100-yds. from a sandbag. Abbreviations: Sd (standard deviation), SP (soft point)

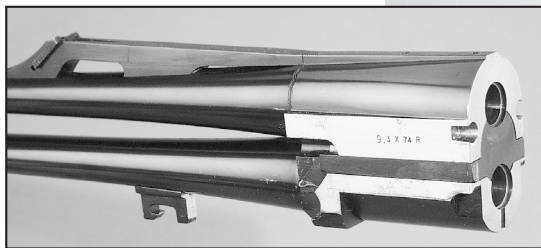
buttstock has a black composite buttpad and is secured to the receiver by a threaded rod that fits through a hole bored through the stock and pistol grip. In addition, the trigger guard has a threaded screw on its front upper surface that threads into the bottom of the receiver.

A careful examination of the Sagittaire impressed everyone with the high order of fit and finish. Of particular note, metal-to-metal and wood-to-metal fit were well above average for a shotgun in this price range. Also notable was checkering quality, which was excellent with straight lines and very few overruns. While at 16 lines per inch the checkering was coarse, we found it smooth and comfortable. The engraving on the fences of the semi-matte, old-silver-finished receiver shows game scenes with scroll borders. The bottom of the receiver and the fore-end latch plate have scroll engraving. We found the engraving tasteful and clean with the coverage just about right.

The Sagittaire was function-fired with Federal, Remington and Winchester ammunition at Sporting Clays and at hand-thrown targets and was patterned with the results shown in the accompanying table. We found the Sagittaire placed its patterns about 3" to 4" low at 40 yds., which is about right for a field gun. Overall handling and

balance qualities were judged very good to excellent.

Verney-Carron's Sagittaire is a top-quality over-under shotgun with a competitive price. For the upland-bird or small-game hunter seeking a light weight shotgun, the Sagittaire seems a particularly good choice. For the mixed game hunter who seeks flexibility in a shotgun, combination gun or double rifle set, the Sagittaire has much to offer at competitive prices. And for the hunter who just wants something different, the Sagittaire combines a unique design with reliability and quality. 



*The properly regulated barrels on our Verney-Carron Battue O-U double rifle in 9.3x74R mm produced respectable accuracy, printing within 1" of each other at 100 yds.*

## Shooting the Double Rifle

We also received an over-under double rifle barrel set to go with our shotgun.

There are two versions of the Double Express rifle—the Battue with 22" barrels and the Traquer with 20" barrels. Either may be had in Classique (standard) or Extra Luxe grade. Our sample was the Battue, which measured 39" long and weighed 7 lbs., 12 ozs.

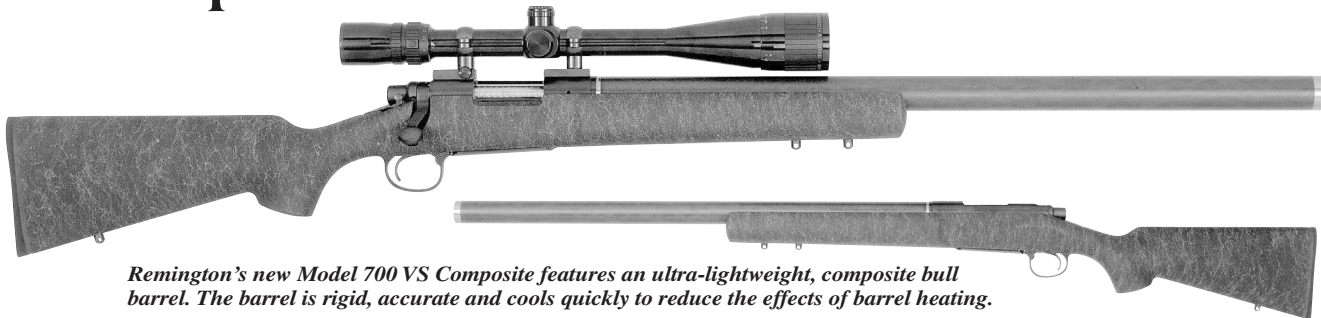
The rifling is conventional, with four lands and grooves and a RH twist, and the sights are one-third length, Battue-type, adjustable sights. The barrels or complete rifles are offered in 7x65R mm, 8x57 JRS mm and 9.3x74R mm. The price for Classique Double Express rifle starts at \$3,350, while a two-barrel set with case is \$4,600 and up.

We test fired the Double Express rifle barrels with Hirtenberger ammunition with a 270-gr. soft point bullet at a measured muzzle velocity of 2221 f.p.s. and 2,959 ft.-

lbs. of muzzle energy. A popular European caliber, 9.3x74R mm remains almost unknown in the United States, but is an excellent choice for large game—such as moose and bear—at close ranges. Double rifles are not known for their extreme accuracy, but they are designed for use at close ranges. The Verney-Carron Double Express rifle proved to have acceptable accuracy in this

respect. More importantly, however, both barrels printed within 1" of each other at 100 yds. showing that the barrels were properly regulated.

## Remington Model 700 VS Composite Barrel



*Remington's new Model 700 VS Composite features an ultra-lightweight, composite bull barrel. The barrel is rigid, accurate and cools quickly to reduce the effects of barrel heating.*

Remington's newest feature for its standard Model 700 center-fire rifle line is an ultra-lightweight, heavy-contour, composite barrel. The barrel consists of a thin, stainless steel, rifled liner, around which epoxy-hardened graphite fiber is wound to form a bull-barrel contour. The result is an ultra lightweight barrel for its size that is rigid and has an amazing ability to dissipate heat.

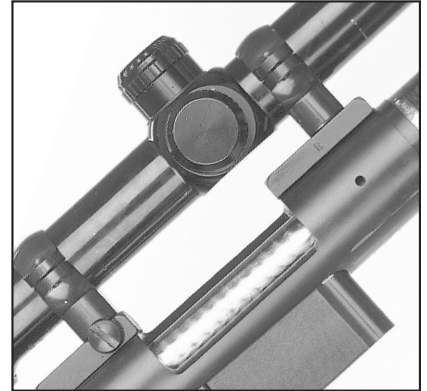
The sample we received for testing was a .223 Rem.-cal. Model 700 VS Composite, the VS denoting Varmint Synthetic. Other calibers offered in this version include .22-250 Rem. and .308 Win. Remington's Sendero Model 700 rifle is also available with a composite barrel, but is chambered for .25-'06 Rem., 7 mm STW and .300 Win. Mag. calibers. Both models weigh about a pound less than their conventional, all-

steel, bull-barrel counterparts. Our test Model 700 VS Composite specifically weighed 7¾ lbs.

We experienced some difficulty finding a suitable scope for mounting on our sample gun because of the 1.25" diameter of the bull barrel. The current rage in high-power scopes is toward high-magnification variables with 50 to 56 mm objective lenses, and these can require

## SHOOTING RESULTS

| .223 Rem. Cartridge   | Vel. @ 15' (f.p.s.) | Energy (ft.-lbs.) | Recoil (ft.-lbs.) | Smallest (ins.) | Largest (ins.) | Average (ins.) |
|---|---------------------|-------------------|-------------------|-----------------|----------------|----------------|
| Federal P223V1 50-gr. HP  | 3621 Avg. 39 Sd     | 1165              | 3.2               | 0.79            | 1.55           | 1.03           |
| Remington PRV223RA 50-gr. VMBT  | 3288 Avg. 59 Sd     | 1201              | 2.9               | 0.65            | 1.27           | 0.91           |
| Winchester SBST223 50-gr. BST   | 3494 Avg. 23 Sd     | 1355              | 3.1               | 1.02            | 2.10           | 1.54           |
| Average Extreme Spread:   |                     |                   |                   | 1.16            |                |                |
| Measured average velocity for 10 rounds from a 26" barrel. Range temperature: 72° F. Humidity: 72%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations: BST (Ballistic Silvertip), HP (hollow-point), Sd (standard deviation), VMBT (V-Max boattail) |                     |                   |                   |                 |                |                |



*We experienced particular difficulty finding a suitable scope for mounting on the sample gun because of its relatively large, 1.25"-diameter barrel. Scopes with large objective bells contacted the barrel unless overly high rings were used.*

barrels are rigid and accurate, and they cool very quickly to reduce the adverse effects of heating.



rings of unreasonable heights to keep the objective bell from contacting the barrel. Often, rings that are too high require the shooter to lift his or her head from the stock to see through the scope, which is not an acceptable situation. For that reason, we opted to use a 6-24X Bausch & Lomb 4000 Elite with a 40 mm objective that cleared the barrel handily and allowed a solid cheekweld.

We fired the Remington Model 700 VS Composite for accuracy at 100 yds. with the results summarized in the accompanying table. The rifle preferred Remington ammunition with Federal coming in a not-to-distant second. Several groups with Federal and Remington were sub-m.o.a., often with four shots within 1/2" and the fifth shot

opening the group. For some reason, our rifle did not care for Winchester's excellent Ballistic Silvertip. There were no malfunctions of any kind.

Perhaps the most remarkable observation during the entire shooting session was in regard to barrel temperature. No matter how fast we fired the rifle, we could not heat the barrel to the point of being too hot to touch.

That the outside of the barrel stays relatively cool is all well and good, but the question remains: what is happening inside the barrel to the stainless steel liner? Independent of our test, *American Rifleman* Contributing Editor Charles E. Petty also tested a Remington Composite rifle. Petty measured actual barrel temperature and noted that the rate of cooling of the composite barrel was so fast that by the time he got the temperature probe in the barrel and allowed it to stabilize, the inside temperature was lower than the outside. He also pointed out that the procedure took a few seconds, and thus he could not state that the inside of the barrel was cooler than the outside. Petty measured a cooling rate of 15 degrees per 30 seconds with the composite barrel compared to 4 degrees per 30 seconds with a steel barrel. That is 74 percent increase in cooling rate.

Remington, then, has substantially improved its already excellent Model 700 VS and Sendero rifles. The composite

## 700 VS COMPOSITE

**MANUFACTURER:** Remington Arms Co., Inc. (Dept. AR), 870 Remington Drive, P.O. Box 700, Madison, NC 27025; (800) 243-9700

**CALIBER:** .223 Rem. (tested), .22-250 Rem., .308 Win.

**ACTION TYPE:** bolt-action repeater

**RECEIVER:** carbon steel

**FINISH:** satin blued receiver, black barrel, gray spiderwebbed stock

**OVERALL LENGTH:** 45 1/2"

**BARREL:** 26" stainless steel liner with epoxy-hardened, graphite shroud

**RIFLING:** conventional, six-groove 1:12" RH twist

**WEIGHT:** 7 1/4 lbs.

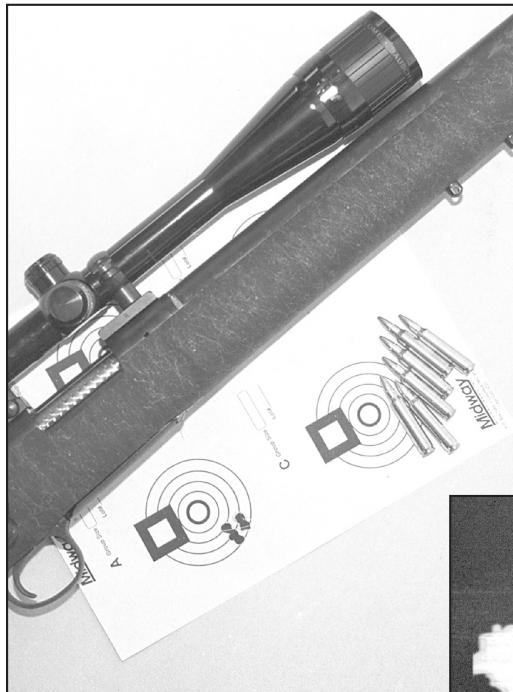
**SIGHTS:** none, drilled and tapped for scope bases

**MAGAZINE:** five-round staggered box with hinged floor plate (four-rounds in .22-250 Rem. and .308 Win.)

**TRIGGER:** single-stage, 5 1/2-lb. pull

**STOCK:** fiberglass/Kevlar composite with aluminum bedding block: length of pull, 13 1/2"; drop at heel, 1"; drop at comb, 1"

**SUGGESTED RETAIL PRICE:** \$1,865



*The Remington Model 700 VS Composite preferred Remington ammunition—with Federal a not-to-distant second. Several groups were sub-m.o.a. with four shots often going within 1/2".*



*This X-ray image shows that the barrel consists of a rifled, stainless steel liner around which epoxy-hardened graphite fiber is wound to form the bull-barrel contour.*