

Weatherby Super VarmintMaster



SVM

MANUFACTURER:

Weatherby, Inc. (Dept. AR), 3100 El Camino Real, Atascadero, CA 93422; (805) 466-1767; www.weatherby.com

CALIBER:

.223 Rem., .22-250 Rem. (tested), .220 Swift, .243 Win., 7 mm-08 Rem., .308 Win.

ACTION TYPE:

bolt-action rifle

MAGAZINE:

internal box with hinged floorplate, five rounds (four in .22-250 Rem.), or available as a single-shot

OVERALL LENGTH:

46"

BARREL:

cryogenically treated, 26", fluted,

heavy-contour, 410-

series stainless steel

RIFLING:

button, hand-lapped, 1:14" RH twist

SIGHTS:

none, drilled and tapped for Weatherby scope bases

WEIGHT:

8½ lbs.

TRIGGER:

single-stage, adjustable; 3½ lbs. pull

STOCK:

hand-laminated synthetic; length of pull, 13½"; drop at heel, 1½"; drop at comb, 3/4"

SUGGESTED RETAIL

PRICE: \$1,399

When most people think of Weatherby, they think of rifles chambered for lightning-fast, big-bore, magnum cartridges possessing power like the hammer of Thor. There is another side of Weatherby, too—one that puts rifle performance ahead of ballistics. Weatherby rifles such as the Accumark focus on accuracy while the Ultra Lights focus on weight. The Ultra Lightweight Magnums combine light weight with magnum power, and the new

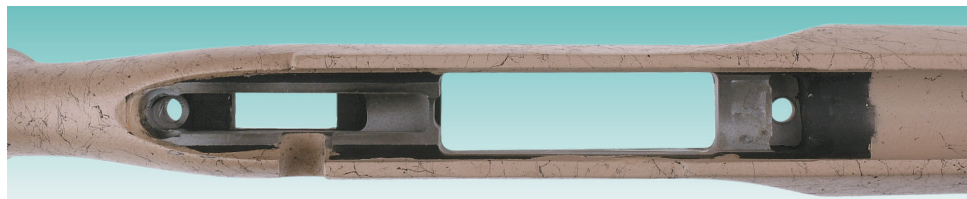
bolt-action Super VarmintMaster (SVM) combines accuracy-enhancing features with others that make the rifle a varmint.

One of the proven accuracy-enhancing features of the SVM is Weatherby's CNC-machined, aluminum bedding block inside the stock. Like in the Accumark, the block stiffens the receiver area of the hand-laminated, synthetic stock and provides a rigid platform for the action. It also runs the length of the stock for added rigidity throughout the

entire stock. Since the fit tolerance between the action and the bedding block is so tight, there is probably no accuracy improvement to be realized from glass-bedding the action. Shooters wanting the stiffest and most rigid action can opt for the SVM as a single-shot. That version doesn't have the cut-out for the magazine, so the bottom of the action is solid steel.

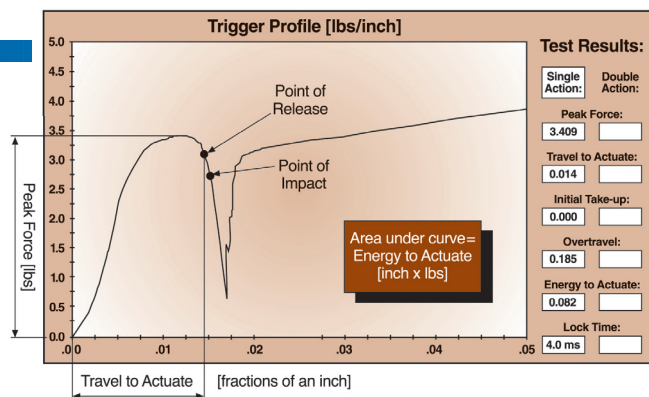
Until recently, all Weatherby rifles were built with three predetermined bedding points:

Like the company's Accumark rifle, Weatherby's SVM employs a CNC-machined aluminum bedding block that stiffens the receiver area of the hand-laminated, synthetic stock and provides a rigid platform for the action.



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.



Weatherby rightly takes great pride in what it calls the “finest factory-tuned trigger.” To back up that claim, each trigger assembly is profiled and adjusted for optimum performance and pull weight of approximately 4 lbs.

recoil lug, tang and fore-end tip. That works well for most hunting rifles, but many accuracy buffs insist that free-floated barrels shoot best. They reason that if the barrel doesn’t touch the stock, any changes in temperature or humidity that could possibly affect the stock are not transferred to the barrel. Free-floating was given a chance in Weatherby’s Accumark and tried also in the SVM, but the three contact points proved more accurate in the varmint rifle.

Weatherby incorporates other accuracy-enhancing features into the SVM. Barrels are heavy and fluted and come from noted barrel maker Krieger. Button rifling is used, which tends to result in a smoother bore than cut rifling. For Weatherby, smooth wasn’t smooth enough, so SVM bores are hand-lapped for an even smoother finish. The muzzle has an 11-degree parabolic target crown to protect the origin of the rifling.

All these barrel treatments are fairly traditional, and their

positive effects are well-documented. Still relatively new to the accuracy buffs, however, is cryogenic barrel treatment. We explored and tested that process extensively last year with mixed results. Most barrels improved, and there was enough evidence supporting an accuracy improvement to enable us to recommend it as worth trying. Weatherby must have thought so, too, and applied the process to the SVM. Taking the metal to a temperature of minus 300° F is claimed to reduce stress and harden the bore of the 410-series stainless steel barrel. While we have difficulty substantiating those specific claims, something does happen to the treated metal, and other industries have experienced longer tool life and more consistency as a result.

Aside from the above, the SVM is plain vanilla as far as Weatherby rifles go. It has a newly designed stock, but not

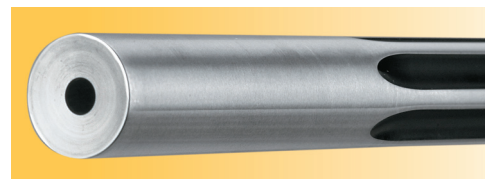
one so bold and flamboyant as some of Weatherby’s older models. Though Weatherby stocks have become more conservative, practical features like the Monte Carlo, which puts your eye behind the scope where it belongs, are retained. The more radical features of the SVM’s stock are the wide, beavertail fore-end that adds stability when shooting off sandbags and the black spiderwebbing finish that, as one staffer put it, “looks kind of cool.”

We mounted a Tasco 24x44 mm World Class target scope on the sample SVM we received and fired it for accuracy with the results shown in the accompanying table. Caliber of the gun was .22-250 Rem., and because of the slow, 1:14" twist, we opted for loads firing light bullets for optimum accuracy. Weatherby guarantees a 1½", three-shot group from a cold barrel at 100 yds. with Weatherby factory ammunition. That is a worthwhile guarantee for a big-game hunting rifle, but not a very practical one for a varmint rifle intended to be fired hundreds of times in a single hunt and in a caliber for which Weatherby does not load factory ammunition. Fortunately, the consistent, small groups we fired suggest Weatherby will not need to honor the guarantee with the SVM often, if ever. One of the features that helped us shoot well was the SVM’s crisp, light trigger pull.

The company rightly takes great pride in what it calls the “finest factory-tuned trigger.” To back up that claim, each Weatherby trigger assembly is profiled and adjusted for optimum performance and a pull weight of approximately 4 lbs.

We had the opportunity to field test a single-shot variant of the SVM rifle on gophers and coyotes at the Buffalo Horn ranch in Meeker, Colo. The rifle was fitted with a Harris bipod and Leupold Vari-X III 6.5-20x50 mm Long Range target scope. Sighting in was with Winchester’s new USA brand 45-gr., .22-250 Rem. ammunition so that bullets hit point of aim at 150 yds. We set up on the edge of a small canyon having low grass and a few gopher holes in it. Shots ranged from as close as 5 yds. to as far as 350 yds. Because of the steep angle, we had to aim low out to about 200 yds. and right on out to 350. Granted, we missed a few of the small, long-range targets, but overall we found the rifle and ammunition combination very accurate and pleasant to shoot throughout the morning.

It’s good to see Weatherby



The Weatherby SVM barrel has an 11-degree parabolic target crown to protect the origin of the rifling.



The Super VarmintMaster, like most Weatherby rifles, is built with three predetermined bedding points: the tang (1), the recoil lug (2), and the fore-end tip (3). Weatherby finds that bedding at these three points, as opposed to using a free-floating barrel, makes these rifles shoot more accurately.

SHOOTING RESULTS						
22-250 Rem. Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Recoil (ft.-lbs.)	Smallest (inches)	Largest (inches)	Average (inches)
Federal 22250A 55-gr. SP	3775 Avg. 30 Sd	1741	4.5	0.78	1.14	0.99
Win. SBST22250A 40-gr. BST	4182 Avg. 44 Sd	1554	3.8	0.82	1.34	1.06
Speer 55-gr. SP, 34 grs. N 140	3441 Avg. 27 Sd	1447	3.9	0.77	1.12	0.96
Average Extreme Spread:						1.00
CCI BR2 primers, R-P cases, 2.38" COL. Measured average velocity for 10 rounds from a 26" barrel. Range temperature: 68° F. Humidity: 83%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations: BST (Ballistic Silvertip), COL (cartridge overall length), Sd (standard deviation), SP (soft-point).						

branching out into task-specific rifles beyond its traditional super magnum, big-game hunting guns. Watch these pages for a review of Weatherby’s new predator-specific rifle, the Super PredatorMaster that is based on the SVM, and late next year for the company to delve into the world of carbon fiber composite barrels.



Remington 3½" 11-87 Super Magnum

Remington has introduced the Model 11-87 Super Magnum—an update of its 13-year-old, field-proven classic—to readily digest any 12-ga. shotshells ranging from 2¾" field loads to the heaviest 3½" magnums.

11-87 SUPER

MANUFACTURER:

Remington Arms Co.,
Inc. (Dept. AR), 870
Remington Drive., P.O.
Box 700, Madison, NC
27025-0700;
(800) 243-9700;
www.remington.com

GAUGE:

12, 3½"

ACTION TYPE:

gas-operated, semi-automatic shotgun

RECEIVER:

carbon steel

OVERALL LENGTH:

45½"
BARREL: 26" (tested), 28" with ventilated top rib

CHOKE SYSTEM:

Rem Choke

SIGHTS:

white front bead, silver mid-rib bead

FINISH:

matte black

MAGAZINE:

four-shot tubular (3-shot with 3½" shells)

WEIGHT:

8 lbs., 4 ozs.

TRIGGER:

single-stage, non-adjustable; 5½-lb. pull

STOCK:

American walnut or black synthetic; length of pull, 14½" (14" on synthetic); drop at heel, 2½"; drop at comb, 1½"

ACCESSORIES:

choke tubes: full, modified, improved cylinder; tube wrench, safety lock key

SUGGESTED RETAIL

PRICE: \$852

The progression of Remington's semi-automatic shotgun design has been evolutionary. First came the Model 11, a licensed version of Browning's Auto-5 that was given a new look after World War II and dubbed the Model 11-48. That shotgun spawned one of the most successful field guns ever, the Model 1100, and from that design sprang the Model 11-87.

Just like organisms in nature must adapt to their changing environments, firearms makers must adapt their products to changing markets. A few years ago, European shooters clamored for a lightweight version of the 11-87 and got it as the Model 11-96 Euro Lightweight. More recently, American hunters caught up in the "bigger is better" rage, especially for shooting steel shot at waterfowl, demanded semi-automatic shotguns capable of delivering large payloads of shot. For them, Remington has adapted the Model 11-87 by introducing the Model 11-87 Super Magnum, capable of readily digesting any 12-ga. shotshell ranging from 2¾" field loads to the heaviest 3½" magnums.

Achieving functional reliability over such a broad range of shotshell power levels requires a gas metering system to regulate the amount of gas working the gun and the amount of surplus gas exhausted from the gun. When firing 2¾" field loads in the 11-87 Super Magnum, all propellant gas passes through the gas cylinder and presses the piston and action bar sleeve rearward to cycle the action.



Heavier 3", 3½" and magnum shells do the same, but they also activate an integral pressure relief valve in the form of a spring clip that opens proportionately to release gas pressure greater than that necessary to cycle the gun. Added benefits of this system are that it governs the speed of the bolt to decrease the rate of wear and typically lowers perceived recoil.

There are 25 new or altered components in the Super Magnum version of the Model 11-87, so little or no parts interchangeability exists between it and the 3"-chambered gun. Dimensionally, the longer 3½" shells require an ejection port lengthened by almost 1/4", with the ejector stud moved back an additional 1/2" on the barrel extension. Overall length of the receiver is increased 1/4", while overall weight is only one ounce more than the Model 11-87 shotgun this magazine tested in 1987.

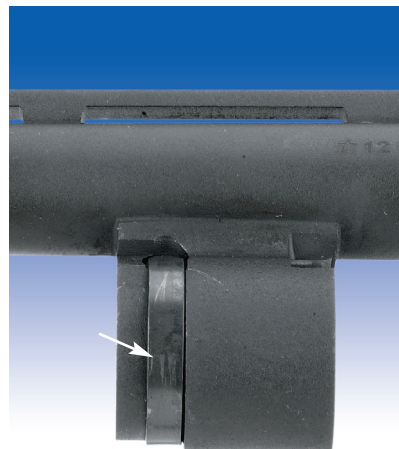
Both wood- and synthetic-stocked models are offered, and barrels can be had in 26" or 28" lengths. Both have the Rem Choke interchangeable tube system and twin beads on a

ventilated top rib. In keeping with its intended purpose of hunting, both wood- and synthetic-stocked 11-87 Super Magnum shotguns are totally matte-finished.

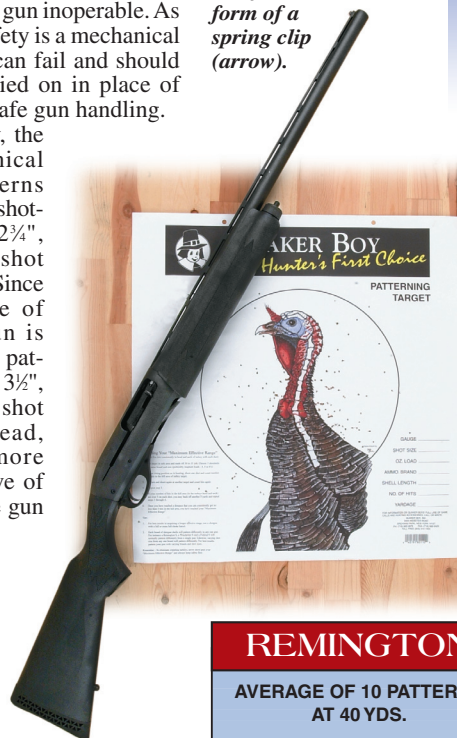
Like all current-production Remington shotguns, the Model 11-87 Super Magnum has the ISS safety lock. The device is built into the safety button proper and with the supplied key allows owners to lock the button in the "safe" position in an effort to render the gun inoperable. As always, a safety is a mechanical device that can fail and should never be relied on in place of proper and safe gun handling.

Typically, the NRA Technical Staff patterns most 12-ga. shotguns with 2¾", No. 6 lead shot field loads. Since the purpose of this shotgun is hunting, we patterned it with 3½", No. 2 steel shot loads instead, which is more representative of the loads the gun

The Super Magnum receiver (above) has a 1/4"-longer ejection port and allows 1/2" more travel than that of the standard 11-87. The gun's gas-metering system vents excess gases through an integral pressure relief valve in the form of a spring clip (arrow).



The 11-87 Super Magnum is not a lively gun, but in all fairness, it's not intended to be. Instead, it has the heft needed for making smooth, sustained leads on game such as passing waterfowl. Included with the gun are screw-in choke tubes (above) in full, modified and improved cylinder, a tube wrench (top) and a safety lock key.



will fire. Pattern results are shown in the accompanying table. There were no malfunctions with this load.

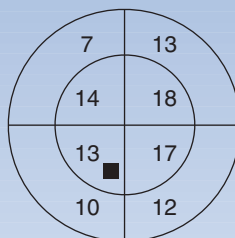
The fact that the 11-87 Super Magnum functions reliably with heavy, 3½" hunting loads is fine, but many hunters view a shotgun as an all-purpose tool that must be equally at home on the sporting clays course or dove field as in the duck blind or goose pit. Functional reliability is no less important in such venues, so we further function fired the Remington 11-87 Super Magnum using PMC 2¾" target loads on sporting clays. Those loads consisted of 1½ oz. of No. 8 shot and three drams equivalent powder. Such target loads are at the bottom end of the 11-87 Super Magnum's power spectrum and would not reliably cycle the action every time. We had brought along some heavier loads that would cycle the gun, and loaded the PMC shells so they were chambered for the second shot. That was the extent of any functioning problem with our 11-87 Super Magnum.

While not lively, the 11-87 has the heft for making smooth, sustained swings on game such as passing geese or for taking steady aim at turkeys. For those seeking the versatility of a semi-automatic 12-ga. shotgun chambered for 3½" shells and whose loyalties lean toward the generations-old Remington brand name we say, "Your shotgun has arrived."



REMINGTON

AVERAGE OF 10 PATTERNS
AT 40 YDS.



Modified choke tube

■ = Point of Hold
Federal PW 1332

12-ga., 3½"—1½ oz.—No. 2 steel

Average Pellet count=169

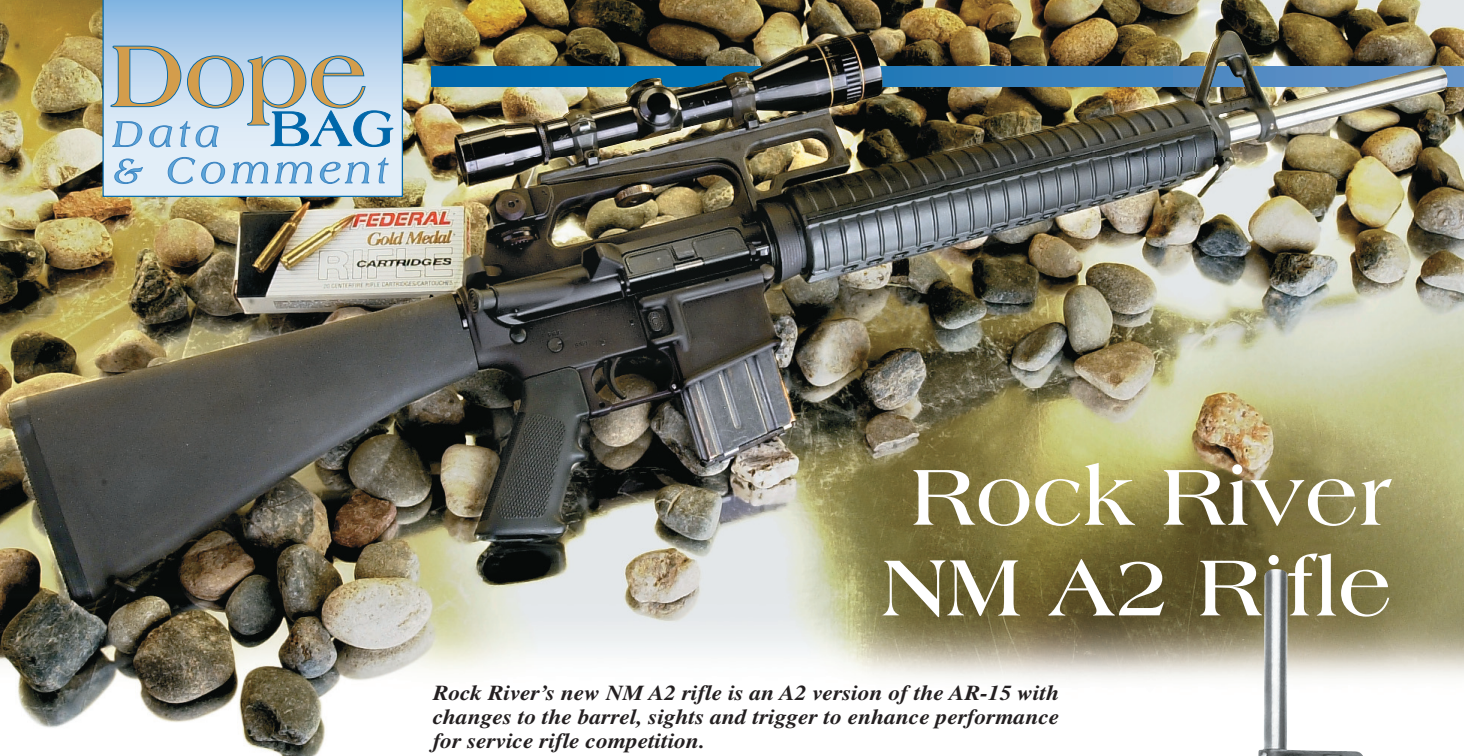
Measured Velocity @ 3'—1392 f.p.s.

Remaining Energy

Per Pellet @ 40 yds.: 3 ft.-lbs

Recoil: 47.4 ft.-lbs

Total Hits	104 (62%)
21.2" Inner Circle	62 (37%)
30" Outer Ring	42 (25%)



Rock River NM A2 Rifle

Rock River's new NM A2 rifle is an A2 version of the AR-15 with changes to the barrel, sights and trigger to enhance performance for service rifle competition.

Rock River NM A2

MANUFACTURER: Rock River Arms, Inc. (Dept. AR), 101 Noble St., Cleveland, IL 61241; (309) 792-5780; www.rockriverarms.com

CALIBER: .223 Rem.

ACTION TYPE: gas-operated, semi-automatic, center-fire rifle

RECEIVER: forged aluminum

FINISH: matte black

OVERALL LENGTH: 38½"

BARREL: 20" stainless steel

RIFLING: conventional, six-groove 1:8" RH twist

WEIGHT: 9 lbs., 7½ ozs.

SIGHTS: A2 national match type with 1/4 m.o.a. windage and 1/2 m.o.a. elevation adjustments

MAGAZINE: detachable, double-column 10-round box (AR-15/ M16 compatible)

TRIGGER: two-stage, non-adjustable, national match; 4½-lb. pull

STOCK: A2-type, black synthetic; length of pull: 13¾"; drop at heel, 2½"; drop at comb, 2½"

ACCESSORIES: one

10-round magazine

SUGGESTED RETAIL

PRICE: \$1,200

Building on its success offering M1911A1 pistols (March 1999, p. 58), Rock River Arms recently introduced a line of AR-15-type rifles. At present, six models of AR-15-type rifles are on offer: CAR A2, CAR A4 Flattop, LE Tactical Carbine, Standard A2, Standard A4 Flattop and NM A2-DCM Legal. In addition to rifles, Rock River also offers complete upper receiver assemblies, stock assemblies, barrels and parts. We received an NM A2 rifle for test and evaluation.

Civilian Marksmanship Program (formerly Director of Civilian Marksmanship) rules governing service rifle competition allow carefully specified modifications of the service rifle barrel, sights and trigger. In its NM A2 rifle, Rock River has made a very sensible move by introducing an out-of-the-box rifle that already incorporates virtually all of the modifications allowed by DCM/CMP rules for competition as a service rifle. We must also add that this rifle is appropriate for NRA's own Service Rifle class in highpower rifle competition. In the past,

hopeful competitors first had to buy an AR-15-type rifle, then spend additional hard-earned money upgrading major parts.

Rock River begins with forged aluminum upper and lower A2 receivers of its own manufacture specially selected for extra-tight fit. It is important to note here that despite that, both receiver halves remain completely within military specifications to meet DCM/CMP rules.

Next, Rock River installs a 0.727"-diameter, 20", stainless steel, match-grade barrel with a national match sleeve. To maximize accuracy, the bore of the Rock River NM A2 rifle is not chrome-plated. A rifling twist of 1:8" replaces the faster, 1:7" twist on M16A2 rifles. Although a compromise twist rate, the 1:8" twist is fast enough to stabilize heavy, match bullets weighing approximately 75 grs. as well as M855 ball ammunition with a 63-gr. FMJBT bullet. The Rock River NM A2 barrel is not equipped with a muzzle device of any kind and is not threaded to accept one. On all other models of Rock River A2 and A4 rifles, a muzzle brake is optional at extra cost (except on the LE Tactical Carbine where it is standard equipment).

The NM A2 rifle comes equipped with a national match-type rear sight having 1/4-minute windage adjustments and 1/2-minute elevation adjustment knobs with detents. Letters and arrows on the windage knob and the sight base indicate the proper direction to make adjustments. Mounted in the normal



The 20", match-grade, stainless steel barrel of the Rock River NM A2 rifle is not threaded or equipped with a muzzle device.

SHOOTING RESULTS

.223 Rem. Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Recoil (ft.-lbs.)	Smallest (inches)	Largest (inches)	Average (inches)
PMC No. 223SMA 52-gr. HPBT	3001 Avg. 15 Sd	1040	2.2	0.55	1.17	0.72
Black Hills No. 68-gr. HPBT	2717 Avg. 19 Sd	1115	2.5	0.82	1.19	1.01
Hornady No. 8026 75-gr. HPBT	2615 Avg. 12 Sd	1139	2.9	0.97	1.56	1.20
Average Extreme Spread:						0.97
Measured average velocity for 10 rounds from a 20" barrel. Range temperature: 68° F. Humidity: 83%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations: Sd (standard deviation), HPBT (hollow point boattail).						

position at the rear of the carry handle, the flip-type national match rear sight features dual apertures: one with a .040" opening for use beyond 250 yds. and one with a .050" opening for use out to 250 yds. The front sight remains the standard protected post adjustable for elevation. On the Rock River Standard A4 Flattop, LE Tactical Carbine and CAR A4 Flattop rifles, a Weaver-type gas block with detachable front sight is optional.

Rock River installs a two-stage, non-adjustable, national match-type trigger on all its rifles save the LE Tactical Carbine which has a standard trigger. In our tests,

on the NM A2 rifle.

While a standard Rock River A2 rifle (as well as an M16A2) weigh about 8 lbs., 3 ozs. without a magazine, the Rock River NM A2 rifle weighs 9 lbs. 7½ ozs. without a magazine. That is some 15 percent heavier, which does much to decrease recoil and muzzle jump in rapid fire despite the absence of a muzzle device. Nearly all of the added weight derives from the NM A2's heavy barrel. Although the added weight is immediately noticeable, the balance of the Rock River NM

We mounted a scope on the Rock River NM A2 to test accuracy, which proved very good indeed. Made of forged aluminum alloy, the upper and lower A2-type receivers of the NM A2 rifle (below) are specially selected for an extra-tight fit. Despite that, they remain within military specs.



the national match-type trigger performed well. Following approximately 1/4"

of slack, take-up proved prompt with a crisp, predictable let-off. Pull weight was measured at a little less than 5 lbs.

DCM rules for service rifle competition require G.I.-style stocks, and Rock River NM A2 rifles meet that requirement with A2 stocks of standard configuration and dimension. That said, Rock River uses only high-temperature, Thermo Mold front handguards instead of the injection molded plastic types found on some other brands of AR-15-type rifles. Two G.I.-type sling swivels and a serrated steel buttplate are standard equipment

A rifling twist of 1:8" replaces the faster, 1:7" twist on M16 rifles. Although a compromise twist rate, the 1:8" twist is fast enough to stabilize heavy, match bullets weighing approximately 75 grs. as well as M855 ball ammunition with 63-gr. FMJBT bullets.


round capacities and quality aftermarket magazines will fit all Rock River rifles as well.

A careful inspection of the Rock River NM A2 rifle shows it to be in the standard A2 configuration in all respects, but, of course, with semi-automatic-only fire control. The two-piece, ventilated, ribbed handguard, pistol grip with finger grooves and lengthened buttstock are pure A2. Also present are the familiar bolt forward assist, spring-loaded ejection port cover and storage compartment in the buttstock. Disassembly and assembly are exactly the same as with the AR-15 family of rifles. Most parts in the NM A2 rifle are interchangeable with other such rifles.

Workmanship, fit and finish on the example tested were impressive. We particularly liked the evenly applied, mil-spec finish and the consistent trigger. Although the rear sight adjustments worked well, we mounted a scope and cheek pad

to test accuracy with as few variables as possible. Accuracy proved very good indeed, as will be confirmed by the figures in the accompanying table.

To test functioning, we first cleaned the rifle, then lubricated it properly before firing. We then fired 240 rounds of factory ammunition in various bullet weights without incident and without cleaning. Following a thorough cleaning, velocity and accuracy checks were fired from a sandbag rest, again without incident. Back in March 1999, we wrote of Rock River's M1911 Bullseye Wadcutter Pistol: "Out of the box, this [gun] proved capable of firing possibles in all appropriate stages of National Match competition." As our test shows, the same can be said of the NM A2. In test firing this rifle, the reduction in side blast due to the absence of a muzzle device was very noticeable and will undoubtedly be welcome on the firing line by neighboring competitors.

For competitors at the beginning, intermediate and advanced levels, the Rock River NM A2 rifle offers an out-of-the-box, service rifle modified to the maximum extent allowed under DCM/CMP service rifle competition rules. Shooters who desire an accurate service rifle, but who do not wish to do their own gunsmithing work or purchase all the necessary parts separately will also find the NM A2 rifle of considerable interest. 



A2 rifle remains acceptable.

A 10-round, double-column magazine will be supplied with every Rock River A2 and A4 rifle. Additional 10-round magazines are optional at additional cost. Of course, surplus G.I. M16 magazines of 20- and 30-



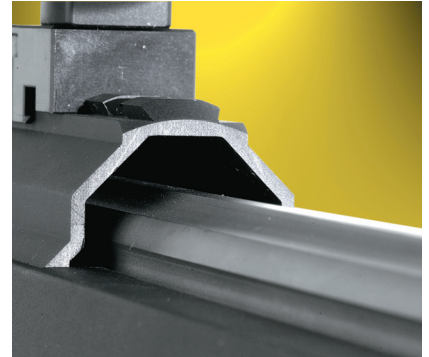
Sommer+Ockenfuss Shorty Marksman



Shooters looking for a rifle with the strength, accuracy and versatility of a bolt-action and the speed of a pump should consider the grip-actuated, straight-pull Sommer+Ockenfuss Shorty now being imported into the United States by Lothar Walther of Cumming, Ga. The Shorty is offered in three

models in hunting calibers up to .416 Rigby. The hunting rifle has a walnut stock and fore-end, light-contour, 24" barrel and engraved false side plates; the synthetic-stocked sporting rifle is fitted with a heavy, 26½" match barrel chambered for .308 Win., .30-'06 Sprg. or .300 Win. Mag; and the Marksman precision version, which has the same length match barrel as the sporting model along with a muzzle threaded for a brake, a Parker-Hale bipod and a stock-mounted monopod. All are available in right- and left-hand versions. We tested the Marksman in .308 Win.

The Shorty's bullpup design allows it to accommodate a 26½" barrel within its 33½" overall length. Cycling the action is accomplished by sliding its black synthetic pistol grip assembly back and forth in a manner similar to that of a pump-action firearm. As the grip is pulled to the rear, two steel actuator arms riding on opposite sides of the aluminum receiver lower and retract the bolt. When the bolt opens, it rides over the hammer and cocks it. The hammer is connected to the stainless steel trigger by a rod. All major trigger components, including the ham-



An aluminum receiver extension keeps the scope base from making contact with the Sommer+Ockenfuss Shorty's 26½" fluted match barrel.

mer and the trigger blade, are stainless steel. The hammer, trigger blade and other trigger components are fixed and do not reciprocate with the pistol grip.

When cycling, the trigger blade passes through a slot in the front of the black synthetic trigger guard. Releasing the grip safety bar on the backstrap blocks movement of the trigger. The bar is a passive safety and must be compressed for firing and released to open or close the action for extraction and reloading. The action will not open when the hammer is cocked, so unloading or inspecting the chamber with the trigger in this condition requires engagement of the Shorty's positive safety mechanism. That is accomplished by pulling the grip safety bar upward, depressing it, then pulling the entire pistol grip assembly an inch and a half to the

rear until it indexes with a white dot on the left side of the receiver, thus lowering and retracting the bolt away from a chambered cartridge.

Pushing forward on the pistol grip pulls the Shorty's bolt up and into battery. The blued bolt has a flat face and is machined from carbon steel into a tombstone shape. Its six lugs include four



For those looking for a rifle with the strength, accuracy and versatility of a bolt-action and the speed of a pump, the German-made Sommer+Ockenfuss Shorty, offered in three models in hunting calibers, may prove just the ticket.

SHOOTING RESULTS

.308 Win Brand/Load	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Recoil (ft.-lbs.)	Smallest (inches)	Largest (inches)	Average (inches)
Norma 168-gr. HPBT	2693 Avg. 13 Sd	2707	12.3	1.19	1.44	1.31
Black Hills 175-gr. HPBT	2682 Avg. 13 Sd	2796	13.0	1.18	1.57	1.37
Hornady 168-gr. HPBT LM	2883 Avg. 11 Sd	3100	13.8	1.02	1.78	1.36
Average Extreme Spread:						1.34
Measured average velocity for 10 rounds from a 26½" barrel. Range temperature: 68° F. Humidity: 83%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sand-bag. Abbreviations: HPBT (hollow point boat-tail), LM (light magnum).						

MANUFACTURER: Sommer und Ockenfuss GmbH, Buehlerweg 4, D-72258 Baisersbronn, Germany; www.sommer-ockenfuss.com

IMPORTER: Lothar Walther Precision Tools, 3425 Hutchinson Road, Cumming, GA 30040; (770) 889-9998

CALIBER: .308 Win.

ACTION TYPE: grip-actuated straight-pull, bolt-action

OVERALL LENGTH: 33"

BARREL: 26"

RIFLING: 1:12"

MAGAZINE: detachable, five-round box magazine (10-round magazine available as an accessory)

WEIGHT: 9.5 lbs.

SIGHTS: no metallic sights provided, receiver extension grooved for attachment of accessory scope base and rings

TRIGGER: two-stage, 4-lb. pull

STOCK: black synthetic with adjustable monopod length of pull, 16"; drop at heel, 0"; drop at comb, 0"

ACCESSORIES: Parker-Hale bipod

SUGGESTED RETAIL

PRICE: \$2,100

stainless steel cross-pin. Shims are available as an accessory to increase length of pull.

Milled into an H-shape, the one-piece aluminum receiver frame extends the entire 27" length from the buttplate to the end of the fore-end. The top half contains the bolt and barrel, while the magazine well and trigger components are housed in the bottom half. The bolt rides in the gap between the barrel extension and the

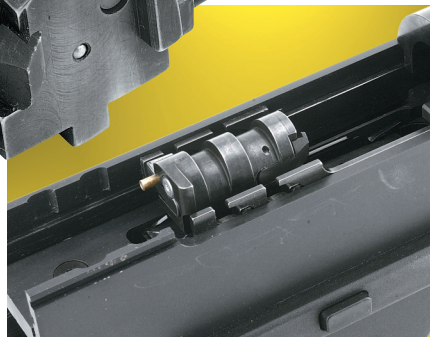
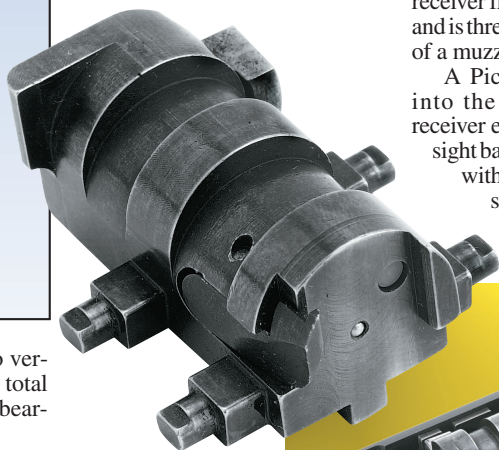
The panels are fixed by a large steel cross-pin, which, like the one that holds the buttplate, has a sling loop that swivels 360 degrees on the left side of the receiver.

The Marksman's barrel is fluted to enhance rigidity and heat dissipation. It is held to the receiver frame by an annular ring and is threaded for the attachment of a muzzle brake.

A Picatinny rail is milled into the Shorty's aluminum receiver extension and keeps the sight base from making contact with the barrel. No metallic sights are provided with any of the S+O Shorty rifles, but the

crisply cut to precise shapes and tooling marks are kept to a minimum. The two-stage trigger broke cleanly at 4½ lbs.-pull with no discernable creep or stacking and minimal overtravel. However, the grip safety bar was the cause of several complaints. It depressed easily and caused no problems while firing, but the need to release it for extraction and reloading reduced the firer's mechanical advantage for opening and closing the bolt. The Shorty's straight-pull action aggravates the problem because it lowers the bolt out of battery instead of camming or turning it so primary extraction is weak. The Shorty's straight-pull action locks up solidly, but it cannot seat and extract stubborn cases with the authority of a comparable bolt-action. Furthermore, engaging and releasing the positive safety proved rather awkward because manipulating the grip safety bar then the pistol grip requires two separate hand movements.

In sum, the Shorty Marksman both intrigues and confounds. Sportsmen who love their bolt-action rifles will wonder why it even exists, but those who have sacrificed accuracy potential as well as choices of calibers and bullets in search of a faster repeating action may find the Shorty rifle a compelling alternative to lever- and pump-action firearms.



The Shorty's blued bolt is machined from carbon steel. Its six lugs include four lateral projections and two vertical lumps that provide twice as much bearing surface as most bolt-action rifles.

buttplate and a black synthetic polymer shroud and ejection port flap protects the action from debris. The detachable, single-column, blued steel magazine holds five rounds, and a 10-round magazine is optional. The follower is black synthetic, as is the floor plate extension. The release button on the right side of the stock must be pressed for both insertion and removal of a magazine.

A forward-folding Parker-Hale bipod attaches to a well at the bottom of the fore-end. Black synthetic panels slide over the front of receiver walls to improve the grip of the shooter's non-firing hand and insulate it from barrel heat.

rail's 10¼" length should accommodate a wide variety of scopes. We mounted a Schmidt & Bender 3-12X PM II model scope for accuracy testing using factory-loaded match ammunition. Results are shown in the accompanying table. The rifle's heavy weight, muzzle brake and in-line stock combine to make perceived recoil negligible. There were no malfunctions relating to feeding or extraction.

Fit and finish of the Shorty Marksman are truly first-rate. All of the metal parts are

lateral projections and two vertical lumps that provide a total of .263" square inches of bearing surface.

The extractor is a claw-type unit pinned to the right-hand side. The tail end of the ejector plunger on the bolt's right side extends beyond the rear of the bolt. An aluminum buttplate at the rear of the receiver limits the bolt's rearward travel and compresses a rebounding spring that surrounds the plunger to push the ejector out the front end of the bolt face and eject the cartridge case.

A soft rubber recoil pad is attached to the buttplate by two slotted machine screws, while the entire buttplate assembly is held to the receiver by a large



The one-piece, aluminum receiver is milled into an H-shape and runs from the buttplate to the end of the fore-end.



Releasing the grip safety bar on the backstrap blocks movement of the trigger. The bar is a passive safety and must be compressed for firing and released to open or close the action.



The S+O Shorty's stock toe and

detachable magazine (arrow) are uniquely recurved. Additional stability for prone shooting is provided by the rifle's adjustable rear monopod