

# DOPE BAG

Dope Bag is compiled by Staff and Contributing Editors: David Andrews, Hugh C. Birnbaum, Bruce N. Canfield, Russ Carpenter, O. Reid Coffield, William C. Davis, Jr., Pete Dickey, Charles Fagg, Robert W. Hunnicutt, Mark A. Keefe, IV, Angus Laidlaw, Scott E. Mayer, Charles E. Petty, Robert B. Pomeranz, O.D., Jim Supica, Charles R. Suydam, A.W.F. Taylerson and Stanton L. Wormley, Jr.

**CAUTION:** 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

## LLAMA MINIMAX 45

**L**LLAMA was the victim of some very unfortunate timing with its IX-C autoloader (October 1994, p. 58), a large-capacity .45 that arrived just in time for the enactment of the Violent Crime and Law Enforcement Act.

Fortunately, with some astute prodding from its U.S. importer, Llama rebounded with the MAX-1 (June 1995, p. 52), a single-stack M1911 type that corrected many of the shortcomings of previous Llamas and that was priced to pick up some of the business opened up by the import ban on Chinese-made M1911s.

Now the Spanish maker has responded to the current craze for smaller carry pistols with the Minimax 45, a pocket-sized .45 that carries forward many MAX-1 features. With its 3 $\frac{1}{16}$ " barrel, the Minimax ranks in size between the 3 $\frac{1}{2}$ "-barreled Colt Officer's ACP and the 4 $\frac{1}{4}$ "-barreled Commander (and Llama's own IX-O).

Magazine capacity is six, and the Minimax, like other Llamas we have tried, will accept aftermarket M1911 magazines, including the extended 10-round variety. The supplied matte-finished steel magazine has witness holes up to the maximum capacity of six rounds.

The Minimax's steel frame has a squared and grooved trigger guard, a feature some might find retrograde, since rounded guards have come back in fashion recently, but the shape is subtle and not overly recurved.

The beavertail grip safety from the MAX-1 is included, as is the Commander-



The Llama Minimax 45 is a compact .45 ACP autoloader that comes on the heels of the ill-timed IX-C large-capacity .45 auto.

### LLAMA MINIMAX 45

**MANUFACTURER:** Llama Gabilondo & Cia., Portal de Gamarra 50, 01013 Vitoria Alava, Spain

**IMPORTER:** Import Sports, Inc., Dept. AR, 1750 Brielle Ave., Wanamassa, NJ 07712

**MECHANISM TYPE:** recoil-operated semi-automatic pistol

**CALIBER:** .45 ACP

**OVERALL LENGTH:** 7 $\frac{1}{4}$ "

**BARREL LENGTH:** 3 $\frac{1}{16}$ "

**WEIGHT:** 35 ozs.

**WIDTH:** 1 $\frac{7}{16}$ "

**HEIGHT:** 5 $\frac{1}{16}$ "

**MAGAZINE CAPACITY:** 6

**TRIGGER:** single-stage, 6 lbs. pull

**SIGHTS:** three-dot with rear drift-adjustable for windage

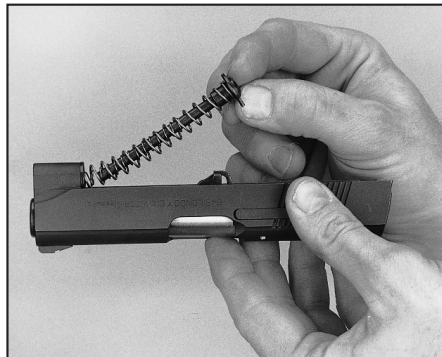
**PRICE:** \$408.95

style modified rowel hammer. The back edge of the grip safety, which was quite sharp on the MAX-1, was better rounded this time out. The slide stop is extended, but the thumb safety has a conventional contour.

The grip panels are the thick rubber units we found so objectionable on the large-capacity Model IX-C, but here and on the MAX-1 they are just comfortably hand-filling. The magazine housing is curved,



Disassembly follows the usual M1911 principles. After ensuring the pistol is unloaded, remove the extended slide stop (l.) and move the slide forward and off the frame. Then lift up the pistol's recoil spring guide (r.) to allow easy removal of the concentric recoil and buffer springs.





The plunger at the right of the disconnect actuates the Swartz safety system that allows the firing pin to move forward only when the grip safety is fully depressed.

though it takes a bit of effort to notice that in its shortened state.

The slide is in the style introduced with the MAX-1, with the rib that was a feature of previous Llama autos deleted and the front of the slide scalloped in the manner expected on M1911s. The sights are a two-dot rear drift-adjustable for windage and a white-insert front that provides a dot-dash-dot pattern.

Llama's M1911-type pistols use the Swartz safety system (January 1976, p. 30). It uses a rod passing upward through the right rear of the frame to press up a plunger in the slide that, in its normal position, prevents the firing pin from moving forward. Taking a normal grip on the pistol extends this firing pin safety actuator, allowing firing.

Should the pistol be dropped, the actuator will snap back into the frame, permitting the safety device once again to prevent firing. The safety is retained by the sear pin and has no effect on trigger pull. It is, however, inconvenient when shooting the pistol from a Ransom Rest, since the actuator effectively prevents slide removal when extended.

The slide is M1911-like with a couple

of exceptions. The extractor is pivoted in the fashion of the Browning Hi Power. In place of the familiar M1911 recoil spring plug is a reverse plug that rests against the back side of the dust shield. Its front is attractively contoured to blend with the muzzle end of the slide.

A recoil spring and buffer spring surround a full-length guide rod that passes through the reverse plug. The barrel is belled at the muzzle to fill the space normally occupied by the barrel bushing. Both the steel frame and slide are finished matte black, a treatment that looks quite purposeful but that rubbed off easily on wear points.

Disassembly fol-

table, and function-fired with AIM, Black Hills, CCI, Hornady and Remington ammunition. There was a single failure to feed the last round of a magazine, but otherwise there were no failures of any kind when we held the pistol normally.

We were able to induce failures to fire by pulling the trigger with a very light grip that failed to depress the grip safety, then



While the Minimax .45 was comfortable enough with the .45 ACP loads we tried in it, it proved to have the very annoying habit of tossing empties in the shooter's face.

## ACCURACY RESULTS

.45 ACP Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
CCI No. 53967 230-gr. TMJ	901 Avg. 30 Sd	4.00	6.75	5.69
Hornady No. 9111 200-gr. FMJ	893 Avg. 12 Sd	4.17	7.00	5.71
3-D No. B45JHP 185-gr. JHP	864 Avg. 32 Sd	2.83	4.75	3.99
Average Extreme Spread				5.13

Five consecutive 5-shot groups from 25 yds., fired from Ransom Rest. Abbreviations: Sd (standard deviation), TMJ (total metal jacket), FMJ (full metal-jacketed), JHP (jacketed hollow-point)

lows M1911 principles, with a few modifications. When removing the slide, be sure not to touch the grip safety, which will extend the firing pin safety actuator, locking the slide. Remove the barrel by first pulling up and out the recoil spring guide and springs, then allowing the plug to drop rearward out of its place. The barrel then is free to be drawn out the front of the slide, M1911-fashion.

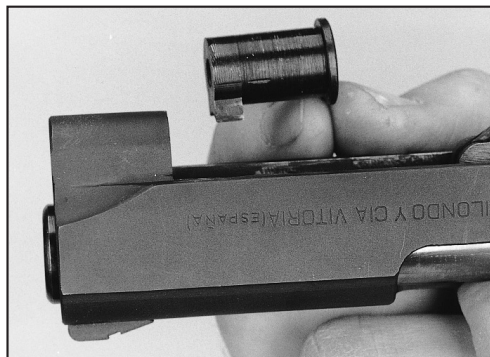
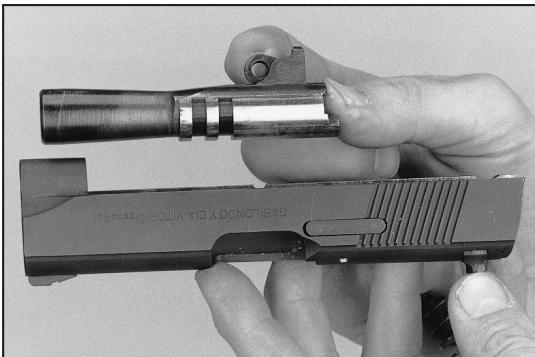
The Minimax 45 was fired for accuracy with results shown in the accompanying



taking a tighter grip and pulling the trigger again. This yielded very light firing pin hits that would not fire the chambered round.

It is difficult to visualize a real-world equivalent of this, except possibly for a partially disabled shooter who probably wouldn't choose a .45 anyway.

Compact autoloaders are often quite



The barrel is flared at the front to occupy the space where one normally would look for a barrel bushing (l.). The extractor is pivoted like the Browning Hi Power rather than following the M1911 pattern. In place of the M1911 recoil spring plug is a reverse plug that rests against the rear surface of the slide apron. A tab on its top closes the space under the muzzle for a more conventional look.




accurate, but the Minimax 45 was an exception to that rule, providing quite mediocre grouping. In several cases, this was because the first shot of a group hit well above its fellows, suggesting incomplete seating of the locking lugs into their slide recesses.

We dealt with this by slamming the slide firmly into battery. This unorthodox procedure made groups rounder, but still didn't produce impressive accuracy. We suspect lockup could be smoothed by a gunsmith

or several hundred rounds of firing, but many pistols shoot much better than this out of the box.

One of the Minimax's most annoying traits was a tendency to toss empties directly into the face of the shooter. This is a pistol that really reinforces the importance of wearing shooting glasses. While a gunsmith experienced with M1911s would readily correct this, a new shooter would find it very disconcerting.

On the credit side, we found the Minimax comfortable to shoot, even with heavy loads. Here its fat rubber grips are an asset. Once we got used to it, we liked the dot-dash-dot sight pattern for speed shooting, though we found it less desirable for close aiming on bullseye targets.

The Minimax 45, then, is a pistol that shows some potential for the defensive user, but that requires a bit more development to smooth out some shortcomings. 

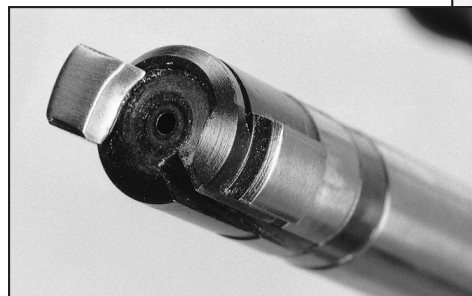
## KIMBER MODEL 84C RIFLE



Kimber has moved up from its bread-and-butter .22 rimfires to a new series of short-action center-fire rifles. One of the most interesting is the Single Shot Varmint with a fluted stainless barrel.

**D**ESPITE enough ups and downs for a soap opera, Kimber has proven to be a name that just won't die. It seemed the firm was down for good after a second bankruptcy, but it reemerged in 1994 under the financial wing of distributor Nationwide Sports. While the initial intention was to concentrate on the Model 82 .22 sporter, the firm took on a successful offering of sporterized 96 and 98 Mausers, and has shown M1911-style .45 automatics and the prototype of a long-action center-fire rifle based on the Australian Sportco 44.

Before taking the leap to the .30-'06 level, Kimber has reintroduced the short-action center-fire Model 84. This was produced in a bewildering array of wildcat calibers during earlier corporate incarnations, generating a whole collector field, but



The bolt head follows the pre-'64 Winchester Model 70, with a non-rotating claw extractor and a slot for the fixed ejector.

### KIMBER 84C

**MANUFACTURER:** Kimber of America, Inc., Dept. AR, 20365 S. Green Mountain, Colton, OR 97017  
**MECHANISM TYPE:** bolt-action rifle  
**CALIBER:** .223 Rem. (tested), .17 Rem., .222 Rem.  
**OVERALL LENGTH:** 42<sup>3</sup>/<sub>4</sub>"  
**BARREL LENGTH:** 24"  
**WEIGHT:** 7 lbs.  
**TRIGGER:** single-stage, 2<sup>1</sup>/<sub>2</sub> lbs. pull  
**RIFLING:** six-groove: 1:12" RH twist  
**STOCK:** Claro walnut: length of pull, 13<sup>7</sup>/<sub>8</sub>"; drop at heel, 7/8"; drop at comb, 1"  
**PRICE:** \$999

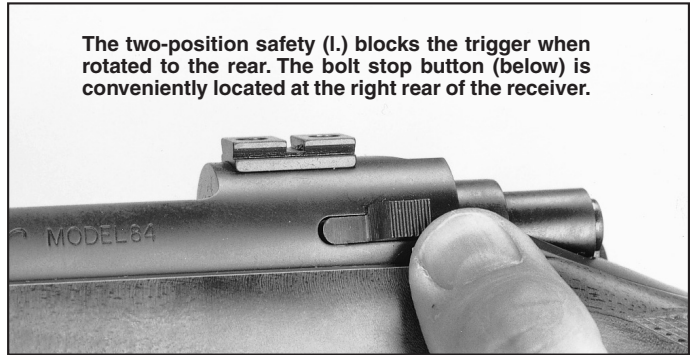
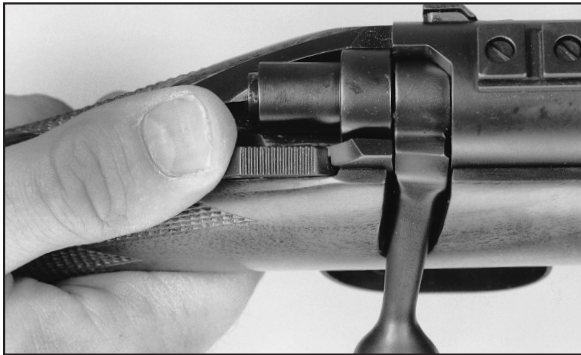
now is restricted to .17, .222 and .223 Rem.

The line includes the Model 84C Classic, with controlled-round feeding from a five-shot magazine, the 84C SuperAmerica, which adds AAA claro walnut, hand-cut checkering and ebony fore-end tip, and the 84C Custom Match, the top of the line with French walnut. The supply of that wood limits availability of the Custom Match.

Our sample rifle was the Single Shot Varmint, equipped with a 24" fluted stainless barrel. The receiver is closed on the bottom, so the magazine parts are deleted and the stock left flat in front of the trigger



The receiver is essentially tubular, with a recoil lug that is dovetailed below the front ring and secured there with a socket set screw. Other 84C variants are equipped with five-round magazines.



The two-position safety (l.) blocks the trigger when rotated to the rear. The bolt stop button (below) is conveniently located at the right rear of the receiver.

guard. The fore-end flares sharply from 1 1/16" to 2 1/2" to provide a wide surface for firing from prone, bench-rest or bipod supported positions.

The Model 84 bolt could be thought of as a miniaturized pre-64 Winchester Model 70, with a non-rotating claw extractor and fixed ejector that protrudes through a slot at the bottom left of the bolt face. Unlike Model 70s on either side of the 1964 divide, there is no mechanism to control overrotation of the bolt, but given the Model 84's short stroke, there's probably no need for one.

In the event of a pierced primer, gas is vented out a hole in the bottom of the receiver. This would go out the magazine in other Model 84 Models; its path would be much constricted in the Single Shot Varmint. A ring on the cocking piece shroud prevents gas moving back along the lug raceway from exiting toward the shooter's eye.

it out too far deactivates the rifle's safety.

The trigger is adjustable for overtravel, pull weight and sear engagement. Overtravel is limited by the top screw at the front of the trigger housing, pull weight by the bottom. Sear engagement is regulated by a Torx socket screw at the rear of the housing. The Torx pattern was selected, no

around the stock screws. These prevent overtightening of the screws and return the action to the same spot every time the screws are snugged up. A sheet of typing paper could be passed between the barrel and its channel in the fore-end.

The trigger guard is the squared-off version used in the rimfires rather than the rounder model specified in the other Model 84s, and the pistol grip is capped in metal.

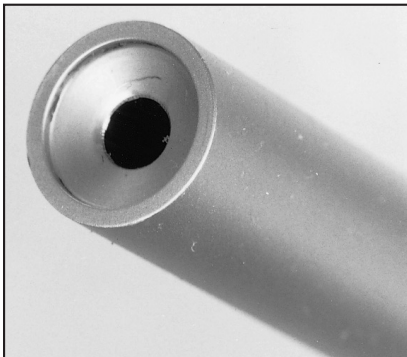
The Model 84C was fired for accuracy with results shown in the accompanying table, and function-fired with Black Hills, Hornady, PMC, Samson and South African military ammunition. There was one failure to fire the surplus ammo, although the primer seemed well-hit.

This was our first encounter with the Hornady VX ammunition, and it lived up to its claim to provide .22-250 velocities from a .223 rifle, though accuracy didn't equal results from more conventional loads.

We liked the Kimber's fixed ejector, which made it easy to keep empties on the bench, and found its relatively light weight appealing for ground hog shooting where walking is required. Some might prefer a synthetic stock, but those who like the warmth of wood will find the Model 84C an attractive choice.



The fore-end flares abruptly at the front of the action. Some found this a good blend of form and function, while others would have liked a smoother transition.



The rifling origin is protected by a muzzle crown that is both dished and recessed. It would take some doing to nick this one.

The receiver body is tubular; the recoil lug is dovetailed in at the front and secured by a set screw. The trigger assembly is screwed to the receiver rear and connected to the two-position safety button by a rod and spring that pass through a shaft at the rear of the trigger assembly.

This is tapped for a hex socket screw that blocks the trigger when the safety is rotated rearward. Turning the screw all the way in prevents trigger movement; turning

doubt, to discourage the idle tinkerer.

The fluted stainless barrel tapers from .97" at the receiver to .65" at the muzzle. The crown is both dished and recessed for maximum protection of the rifling origin.

The sample rifle's Claro walnut stock was checkered in a point pattern at 18 lines per inch. Like other Kimber rifles, it is pillar-bedded with aluminum bushings

## ACCURACY RESULTS

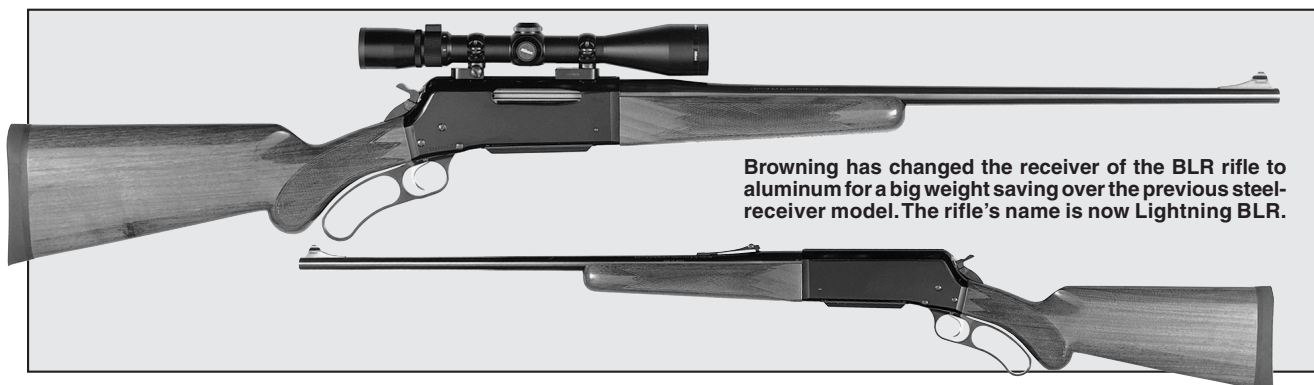
.223 Rem. Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Black Hills 52-gr. HP	3317 Avg. 25 Sd	0.59	0.96	0.77
Hornady No. 8325 40-gr. VX	3811 Avg. 53 Sd	0.97	1.46	1.14
Samson 223-11CM 55-Gr. SPBT	3339 Avg. 7 Sd	0.41	1.07	0.77
Average Extreme Spread				0.89

Five consecutive 5-shot groups from 100 yds., fired from sandbags. Abbreviations: Sd (standard deviation), HP (hollow-point), VX (Varmint Express), SPBT (soft-point boattail)





## BROWNING LIGHTNING BLR



Browning has changed the receiver of the BLR rifle to aluminum for a big weight saving over the previous steel-receiver model. The rifle's name is now Lightning BLR.

**T**HE Browning BLR center-fire lever-action has been around for a almost 30 years, and has gone through several configurations.

It was briefly manufactured by TRW in Cleveland between 1966-68 after that automotive-parts company finished making M14 rifles for the U.S. military. Production then migrated to Fabrique Nationale in Belgium, which made the gun 1970-71. All subsequent BLRs have been made by Miroku in Japan.

When introduced (February 1971, p. 48), it was immediately identifiable by a bulbous detachable magazine and a receiver contoured inward at front and rear to



The detachable box magazine holds three 7 mm Rem. Mags., four standard calibers like the .30-'06 or five .223 Rem. cartridges.

rounds like .222 Rem., .223 Rem., .22-250, .243 Win., .257 Roberts, 7 mm-08 Rem., .284 Win. and .358 Win.

In 1981, the BLR's appearance was considerably improved by a new slab-sided receiver and a magazine box that was more nearly flush with the receiver bottom. Caliber choices were still restricted until 1991, when a new long-action model allowed chambering for the .270 Win., 7 mm Rem. Mag. and .30-'06.



Unlike Old West designs that use a series of levers, the BLR uses a rack and pinion to move the bolt. Its locking is by a rotating bolt head that engages a steel insert.

mimic Old West designs. All things Weatherby were popular at the time, so it used a multi-row arrangement of eight locking lugs at the business end of a cylindrical bolt that was shuttled back and forth by a rack-and-pinion system.

Apparently, the BLR was conceived as a competitor for the Winchester Model 88 (a rifle that had only a couple of years' production left), since it was chambered initially in .308 Win. and later in other short



Browning has dispensed with the barrel tenon and outside band of previous guns and reduced weight by attaching the fore-end to a dovetailed boss below the barrel.

That model (April 1991, p. 56) also introduced a new bolt that combined six locking lugs in a single row with a bolt body gear-shaped in cross-section. It also saw the introduction of a new finger lever that incorporated a separate gear rack spring-loaded to dampen the impact of overeager operation. The rack also featured a cam lever at its top front that provided some initial extraction force to help prevent gear stripping in the event of a swelled case.

In all these changes, the BLR retained a straight-gripped buttstock and a Western-style fore-end with barrel band, retained by a tenon threaded into the receiver.

And it was something of a load, with an all-steel receiver.

Now Browning has decided to freshen up the BLR a bit, and the result is the BLR Lightning. As the name implies, the Lightning is a bit lighter than the Model 81 BLR, thanks to an aluminum receiver. Our 7 mm Rem. Mag. was still no featherweight at 7 lbs., 12 ozs., but that's almost a half-pound lighter than the steel receiver ver-

### BLR LIGHTNING

**MANUFACTURER:** Miroku Firearms Mfg. Co., 537-1 Shinohara-Nangoku City, Kochu Pref., Japan

**IMPORTER:** Browning, Dept. AR, 1 Browning Pl., Morgan, UT 84050

**MECHANISM TYPE:** lever-action rifle

**CALIBER:** 7 mm Rem. Mag. (tested), .270 Win., .30-'06 (long action); .223 Rem., .22-250 Rem., .243 Win., 7 mm-08 Rem., .308 Win. (short action)

**OVERALL LENGTH:** 44<sup>7</sup>/<sub>8</sub>"

**BARREL LENGTH:** 24"

**WEIGHT:** 7<sup>3</sup>/<sub>4</sub> lbs.

**MAGAZINE CAPACITY:** 3 (4 in standard calibers, except 5 in .223)

**TRIGGER:** single-stage, 6 lbs. pull

**RIFLING:** six-groove, 1:9<sup>1</sup>/<sub>2</sub>" RH twist

**SIGHTS:** bead front, open rear adjustable for windage and elevation

**STOCK:** American walnut: length of pull, 14<sup>1</sup>/<sub>4</sub>"; drop at heel, 1"; drop at comb, 1"

**PRICE:** \$608.95

sion. The short-action model for calibers in the .308 Win. class weighs just 6½ lbs.

The weight-reducing effect of the aluminum frame is mitigated a bit by the fact that the buttstock now has a round-knobbed pistol grip and the fore-end, while losing its barrel band, is considerably more bulbous than the previous gun's.

The fore-end tenon also is gone, replaced by a stud dovetailed into the bottom of the barrel. This is the wood's only connection to the barrel; there is plenty of clearance between the two parts.

The basic operating system remains the same. The BLR could be thought of as a hand-operated semi-auto rifle, since the bolt head and body work in much the way they do in the AK-47 or AR-15. As the bolt moves forward into engagement with the steel locking insert in the front of the receiver, a pin inside the bolt body moves up an S-shaped track in the bolt head, turning it counterclockwise to lock.

After firing, the lever is lowered, drawing the bolt body back and rotating the bolt head clockwise to release it from the locking insert. At the same time, a small hook



spur to the firing position, so no thought is required to take it off safe.

The magazine catch is a lever located inside a generous pocket at the junction of the fore-end and receiver. Large or gloved fingers should have no trouble finding it. The detachable box magazine holds four rounds of everything except .223 Rem. (five) and 7 mm Rem. Mag. (three).

Steel bushings in the top of the receiver are drilled and tapped for scope mounting, while the supplied metallic sights are a ramped brass bead front combined with an open rear sight adjustable for windage

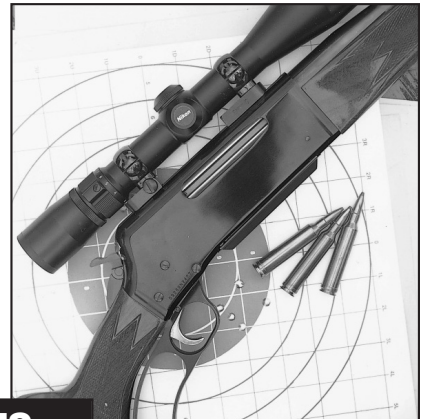
**An extra safety margin is provided by the pivoting hammer spur. Pressing it forward takes it out of line with the firing pin to help prevent firing should the gun be dropped.**

ple gun's was perfect for iron sights but a bit low for a scope.

The BLR Lightning was fired for accuracy with results shown in the accompanying table and function-fired with Federal, Hornady and Winchester ammunition and with a variety of handloads. The only malfunctions suffered were a couple of occasions when the magazine balked at being shoved home and one double feed.

We'd never tried the steel-receiver 7 mm Rem. Mag. BLR, but have fired it in .270 and .30-'06, and there is a distinct step up in recoil with the lightweight 7 mm Mag. It's not in any way out of line for hunting purposes, but a long session at the bench is no picnic.

It is possible to keep the BLR on the shoulder while operating the lever, but it takes a shooter who can disregard the onrush of the bolt that stops just short of the eye. We found this a bit disconcerting at



## ACCURACY RESULTS

7 mm Rem. Mag. Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Federal No. P7RE 165-gr. BTSP	2844 Avg. 11 Sd	0.88	2.53	1.95
Hornady No. 8059 139-gr. BTSP	3001 Avg. 15 Sd	1.77	2.66	2.23
Win. No. S7MAGA 160-gr. STBT	2799 Avg. 38 Sd	1.41	2.34	1.79
Average Extreme Spread				1.99
Five consecutive 5-shot groups from 100 yds., fired from sandbags. Abbreviations: Sd (standard deviation), BTSP (boattail soft-point), STBT (Silvertip boattail), Win. (Winchester)				

**Recoil is a bit more brisk with the new lighter version of the BLR than it was with the old style, but most will find the easier carrying in the field more than makes up.**

extractor withdraws the spent case from the chamber. A plunger ejector on the left side of the bolt face tosses it out once the finger lever is lowered sufficiently.

The gold-plated trigger blade rides with the finger lever, preventing pinching as the lever is closed. The lever must be closed completely for the trigger to contact the sear inside the receiver.

Most of us would tend to regard the lever-action rifle pretty much idiot-proof, and the original BLR had a conventional style hammer. In the early 1970s, however, the firm prudently added a tilting hammer spur that can be pressed forward and down at the half-cock, taking it out of line with the inertia firing pin.

The natural motion of the thumb or bolt retracting the hammer resets the movable

and elevation screwed into the BLR's barrel.

The sample rifle's stock was of a straight-grained medium brown walnut with checkering in a bordered point pattern at 16 lines per inch. Length of pull is a rather long 14¼"; this is no ladies' and junior gun, at least in the long action. We also would have preferred a bit higher comb; the sam-

**The BLR always has been one of the most accurate lever-actions, giving away little in that line to bolt-action rifles.**

first, and ignoring it took some concentration.

Feeding was quite smooth, despite the length and belted rim of the 7 mm Rem. Mag. We were fortunate enough to have the .308 Win. Savage Model 99 in-house at the same time, and it seemed to us that the lever stroke of the BLR wasn't all that much longer than the Savage's, despite the extra length of the 7 mm cartridge.

The Lightning BLR, then, seemed to us a useful freshening of a proven, though somewhat ponderous, lever-action design, making it a bit easier to carry afield. It gives left-handers, traditionalists and other lever gun fans a rifle that gives up little in power and accuracy to bolt-actions.

