



# SPRINGFIELD ARMORY LIGHTWEIGHT OPERATOR



**N**ext to Colt, there are few gunmakers with a longer record of making M1911-style pistols than Springfield Armory. Starting with Government Model “gunsmith kits” in the mid-1980s—basically forged slides and frames—Springfield’s O-frame lineup now includes some 36 different complete pistol models, including high-capacity, reduced-size and custom target models. Springfield’s Custom Shop has garnered a reputation for world-class pistols for carry and competition, and Springfield M1911s

have been selected by various law enforcement agencies.

Today’s M1911 users expect not only the traditional custom touches, but also newer innovations, such as a beefed-up dustcover with an integral Picatinny rail for light or laser mounting. Moreover, carry pistols with lighter-weight aluminum frames have become increasingly popular. Springfield’s Lightweight Operator, introduced in 2007, is designed to meet all these expectations.

The LW Operator is a full-size, 5"-barreled, recoil-operated semi-automatic pistol chambered in .45 ACP. Like all Springfield Government Model guns, the LW Operator follows the Colt Series 70 pattern, which lacks the passive firing pin block mechanism of the later Series 80 pistols.

One major departure from the basic M1911 blueprint is the gun’s stainless-steel match-grade barrel with its Wilson-style integral feed ramp, which replaces the familiar non-ramped barrel of the original design. An additional feature of Springfield barrels is a visual

loaded chamber indicator—a small slot in the barrel hood that allows one to see the rim of a chambered case.

The other salient feature of the LW Operator is found in its forged aluminum Operator frame with an integral Picatinny light rail. The rear half of the frame is like that of pretty much any full-size M1911. Forward of the magazine well, however, the center of the frame is cut out for the barrel ramp, and the sides of the frame flare outward about 0.036" on each side. This gives the walls of the dustcover additional thickness to support the weight of any accessories that may be mounted on the rail.

Sighting is by way of a no-snag fixed rear sight, similar in design to the Novak Lo-Mount, and a 1/8"-wide front post mounted by way of a transverse dovetail. Both units feature green tritium inserts to give a three-dot sighting pattern. The front sight features a nice additional touch: the blending of the dovetail base with the slide contour.



*A two-piece guide rod contributes to reliability, while a snugly-fitted barrel bushing aids accuracy. The dustcover has an integral Picatinny rail.*

## SHOOTING RESULTS (25 YDS.)

.45 ACP CARTRIDGE	VEL. @ 15' (F.P.S.)	ENERGY (FT.-LBS.)	GROUP SIZE IN INCHES		
			SMALLEST	LARGEST	AVERAGE
<b>BLACK HILLS 230-GR. HP +P</b>	991 Avg. 25 Sd	502	1.77	2.84	2.46
<b>HORNADY No. 91128 200-GR. TAP FPD</b>	1067 Avg. 7 Sd	506	1.46	2.17	1.78
<b>WINCHESTER No. X45ASHP2 185-GR. ST HP</b>	1000 Avg. 15 Sd	411	1.47	2.22	1.91
<b>AVERAGE EXTREME SPREAD</b>					2.05

MEASURED AVERAGE VELOCITY FOR 10 ROUNDS FROM A 5" BARREL. RANGE TEMPERATURE: 78° F. HUMIDITY: 40%. ACCURACY FOR FIVE CONSECUTIVE, FIVE-SHOT GROUPS AT 25 YDS. FROM SANDBAGS. ABBREVIATIONS: TAP FPD (TACTICAL APPLICATION POLICE FOR PERSONAL DEFENSE), HP (HOLLOW POINT), Sd (STANDARD DEVIATION), ST (SILVERTIP).



The integral feed ramp (above, l.) on the stainless-steel barrel promotes feeding reliability. A beveled magazine well (above) speeds reloading.

The LW Operator is equipped with a full-length two-piece guide rod, a long ejector, tuned extractor and a lowered, flared and beveled ejection port. The Operator offers a high-grip beavertail grip safety with palm pad, ambidextrous thumb safety, forward slide serrations, beveled magazine well and a front strap that is cut slightly higher under the trigger guard. A long, skeletonized aluminum trigger gives a nominal trigger pull of 4 to 5 lbs. Finally, all sharp corners and edges are thoroughly dehorned.

The aluminum frame of the gun is hard-anodized in a black matte finish, while the slide, sights, slide stop, beavertail, hammer and extractor have an Armory-Kote finish, a proprietary heat-cured Teflon coating. The barrel hood and guide rod tip are polished, and the

stainless barrel bushing has a glass-beaded finish. The checkered Cocobolo grips feature smooth diamonds around the grip screws and a laser-etched Springfield Armory logo.

At the range, we fired the LW Operator for accuracy at 25 yds. from sandbags with loads from Black Hills, Hornady and Winchester, in hollow-point bullet designs of 185, 200 and 230 grs.

The accuracy of our test pistol was exceptional. The best load averaged of 1.78" for five, consecutive five-shot groups. Reliability was also excellent: during our 125-round test-fire session, we experienced no malfunctions. Accuracy and velocity data are given in the accompanying table.

During rapid-fire drills consisting of double-taps at Bianchi and B-27 targets at 7 yds., the gun proved manageable with all loads.

## SPRINGFIELD ARMORY LIGHTWEIGHT OPERATOR

**MANUFACTURER:** Springfield, Inc. (DEPT. AR), 420 W. MAIN ST., GENESEO, IL 61254, (800) 680-6866;  
WWW.SPRINGFIELD-ARMORY.COM  
**CALIBER:** .45 ACP  
**ACTION TYPE:** SHORT-RECOIL-OPERATED, SINGLE-ACTION, CENTER-FIRE SEMI-AUTOMATIC PISTOL  
**FRAME:** FORGED ALUMINUM  
**BARREL:** STAINLESS STEEL, RAMPED, 5"  
**RIFLING:** SIX-GROOVE, 1:16" RH TWIST  
**MAGAZINE:** EIGHT-ROUND DETACHABLE STEEL BOX  
**SIGHTS:** RAMPED DOVETAIL-MOUNTED POST FRONT, NO-SNAG FIXED REAR; TRITIUM INSERTS IN THREE-DOT PATTERN  
**TRIGGER PULL:** SINGLE-ACTION, 4 LBS., 8 OZS.  
**GRIPS:** CHECKERED COCOBOLO  
**OVERALL LENGTH:** 8½"  
**WIDTH:** 1⅞"  
**HEIGHT:** 5½"  
**WEIGHT:** 34 OZS.  
**ACCESSORIES:** HARD PLASTIC CASE, CLEANING BRUSH, HEX WRENCH, OWNER'S MANUAL, EXTRA MAGAZINE  
**SUGGESTED RETAIL PRICE:** \$1,279

Ejection was positive, with fired cases thrown out of the gun about five to seven feet to the right rear.

Even the most demanding user, we suspect, will have a hard time suggesting improvements for the LW Operator. Some testers did pan the lack of any texture on the smooth frontstrap.

But overall, we were highly impressed with the LW Operator. Accurate and reliable, the pistol was also nicely finished and dehorned. All controls operated smoothly, and the trigger pull was just about perfect for a gun of this type. Also, for a factory pistol, the Operator was unusually tight, with virtually no detectable play between the slide and frame and a tight fit of the barrel hood in the slide. Furthermore, the lower barrel lugs rode on the slide stop pin, as they are supposed to, rather than on the link, as is the case with many if not most factory M1911s.

Given its accuracy, reliability and relatively light weight, as well as the capabilities afforded by its integral Picatinny rail, the Springfield Armory Lightweight Operator should be highly attractive to those seeking a quality tactical-style M1911 pistol in .45 ACP.



# EAA "BLACK ARROW" M93 RIFLE



**I**f a single word could describe the Serbian "Black Arrow" M93 .50 BMG, it would be "massive." At 40 lbs. and nearly 60" in length, everything about this rifle is classic Model 98 Mauser magazine-fed, bolt action—except on a steroidal scale.

Imported by European American Armory (EAA) in Rockledge, Fla., the .50 BMG M93 Black Arrow is manufactured by Zastava Arms factory in Kragujevc, Serbia. Established in 1857, Zastava is among the oldest armsmakers in the world.

The Model 93 Black Arrow has been in service since 1990, first in the former Yugoslavia and now with Serbian armed forces. It is produced in two variants; one is chambered in the potent Russian DSHK 12.7x107 mm, and the other in .50 BMG is imported by EAA.

Machined from a solid block of

ordnance steel, the massive square receiver is 14" long, 3" tall, and 2" wide. The detachable five-round box magazine is held in place by a spring-loaded pivoting latch located midway on the right side of the receiver.

The 3-lb., 1"-diameter, 11"-long bolt is a standard controlled-round-feed 98 Mauser; with a claw extractor, dual opposing front locking lugs and a safety lug at the rear. The bright blued bolt is finely machined and polished giving it a very slick feel in the receiver raceways. The bolt handle—measuring 3½" from the root to the ball—provided sufficient leverage to open the action. Even so, some rounds required "gentle application of a soft rubber hammer to open the bolt—a condition not uncommon with .50 BMG rifles.

Two large gas-relief ports are located an inch behind the lugs

to divert gas into the magazine well in the event of a compromised primer or case. In addition, the back of the bolt is capped to prevent any escaping gas from reaching the shooter. The finish on the rifle provides a black, non-reflecting surface.

The 33"-long slightly tapered fluted bull barrel measures 1.26" in diameter at the fore-end and 1.1" at the muzzle. The blocky muzzle brake has four opposing square horizontal chambers that direct gas rearward at a 60 degree angle. Eight deep lands and grooves produce a 1:15.5" right-hand twist.

The Black Arrow is equipped with a non-removable bipod of robust design. The 9" legs extend to 13" and are locked by a threaded, knurled collet tube. Their short, welded, sheet-metal duck feet give stability and prevent digging into soft soil. The one fault with the bipod is its location—the back of the short composite fore-end at the dead center of gravity of the rifle. With the bolt removed, the rifle is very muzzle heavy.

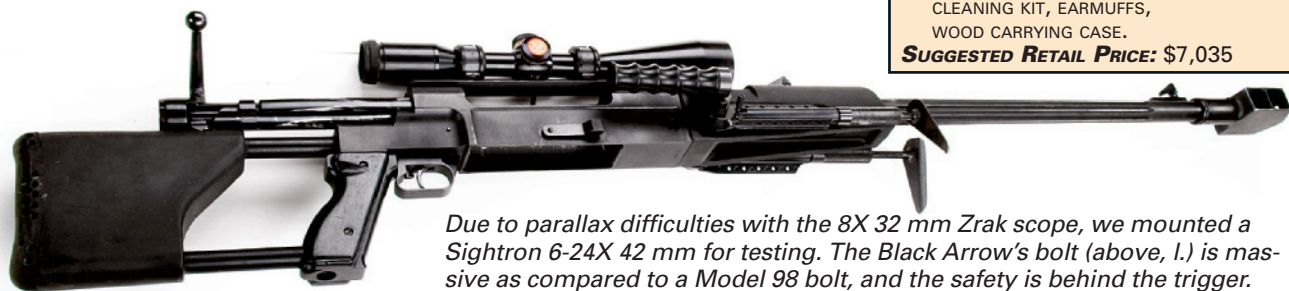


*The Black Arrow comes as a kit inside a wooden crate, complete with its scope and bipod. Recoil was not unpleasant, as the big gun tops the scales at about 40 lbs.*

## SHOOTING RESULTS (100 YDS.)

.50 BMG CARTRIDGE	VEL. @ 10' (F.P.S.)	ENERGY (FT.-LBS.)	GROUP SIZE IN INCHES		
			SMALLEST	LARGEST	AVERAGE
<b>BARRETT .50 BMG BALL, M33, 661-GR. FMJ</b>	2842 AVG. 6 SD	11,098	2.20	6.11	4.01

MEASURED AVERAGE VELOCITY FOR 10 ROUNDS FROM A 34" BARREL OVER AN OEHLER MODEL 35P CHRONOGRAPH. RANGE TEMPERATURE: 68° F. HUMIDITY: 58%. ACCURACY FOR FIVE CONSECUTIVE, FIVE-SHOT GROUPS AT 100 YDS. FROM A SANDBAG. ABBREVIATIONS: FMJ (FULL-METAL JACKET), SD (STANDARD DEVIATION).



Due to parallax difficulties with the 8X 32 mm Zrak scope, we mounted a Sightron 6-24X 42 mm for testing. The Black Arrow's bolt (above, l.) is massive as compared to a Model 98 bolt, and the safety is behind the trigger.

The 8X 32 mm Zrak 1"-tube scope is mounted in rings lined with a relatively hard neoprene. The rings, hinged at the top, are secured to a massive tip-off mount by two slot-head screws. The 10" long scope mount straddles the entire receiver on a flat that is milled at 30 degrees. Removing the mount is accomplished by releasing the lever and holding down the detent and sliding it back off the dovetails.

With the large objective bell, light transmission is excellent, with good contrast and little spherical aberration, though the lens coating produces a greenish tint. The windage and elevation on the Zrak scope are coarse, each click providing approximately 3 m.o.a. of movement. Clicks are precise, as is return to zero. The glass also suffers from parallax; head movement produces 4" of apparent reticle movement at 100 yds., which we found frustrating. For that reason we mounted a Sightron 6-24X 42 mm scope in the supplied 1" rings.

The trigger pull was gritty,

with unpredictably long creep. Its almost 9-lb. let-off detracted greatly from the accuracy potential of the rifle, though the gritty feel smoothed out with wear after about 20 rounds.

There is one other design feature of the Black Arrow that tends to hinder accuracy for some shooters. In order to accommodate the long bolt, the comb of the glass-fiber composite stock lines up just below the bolt when the action is fully open. The operator must assume a heads up position. Though not natural, it can be mastered.

Given the relatively short eye relief of approximately 3", initial trepidation over possible bruised or cut eyebrows, proved unfounded. Recoil is further mitigated by a generous 1" recoil pad and by a pair of heavy spring buffers mounted in the two steel tubes that fasten the buttstock to the rear of the receiver and to the bottom of the pistol grip.

In accuracy testing, the rifle was nestled in a Caldwell Lead Sled

## EAA M93 BLACK ARROW

**MANUFACTURER:** ZASTAVA ARMS, KRAGUJEVC, SERBIA

**IMPORTER:** EUROPEAN AMERICAN ARMORY (DEPT. AR), 402 RICHARD ROAD, ROCKLEDGE, FL 32955; (321) 639-4842; WWW.EAACORP.COM

**CALIBER:** .50 BMG

**ACTION TYPE:** CENTER-FIRE, REPEATING BOLT-ACTION RIFLE

**RECEIVER:** BLUED STEEL

**BARREL:** 33", 36" WITH MUZZLE BRAKE

**RIFLING:** EIGHT-GROOVE, 1:15.5" RH TWIST

**MAGAZINE:** MAUSER-STYLE STAGGERED DETACHABLE BOX; FIVE-ROUND CAPACITY

**SIGHTS:** ZRAK 8X 32 MM SET IN INTEGRAL TIP-OFF MOUNT; FLIP-UP IRON SIGHTS.

**TRIGGER PULL:** SINGLE-STAGE; 9 LBS

**STOCK:** BUFFERED COMPOSITE; LENGTH OF PULL, 13½"; DROP AT HEEL 2½"; DROP AT COMB 2½"

**OVERALL LENGTH:** 60"

**WEIGHT:** 40 LBS WITH SCOPE AND MOUNT

**ACCESSORIES:** EXTRA MAGAZINE, CLEANING KIT, EARMUFFS, WOOD CARRYING CASE.

**SUGGESTED RETAIL PRICE:** \$7,035

DFT with a single 25-lb. bag of shot for ballast weight. In all, we fired 80 rounds of ball ammunition. There were no failures to feed. Functioning was surprisingly smooth and consistent, using the two magazines provided with the rifle.

Range testing of the Black Arrow was accomplished with a single lot of Barrett headstamped .50 BMG M-33 Ball loaded with 661-gr. FMJ bullets. The rifle was sighted-in at 100 yds., and the five-shot groups produced an average of 4". Accuracy improved at 200 yds. as the bullets stabilized. The rifle tended to string vertically when the barrel became heated. Cooling between shots produced consistent groups.

The rifle comes with two magazines, a wooden crate carrying case, cleaning rod and other accessories. As a long-range shooter, the Black Arrow exhibits considerable potential. For Mauser collectors, it is a true rarity among military long-range rifles and might well find a place beside the equally massive venerable World War I *Panzerbuchse* 1918.





# CABELA'S 4.5-14X 42 MM ALASKAN GUIDE RANGEFINDING RIFLESCOPE

**A**lthough Cabela's has long carried all the major makes of telescopic sights, since 1976 the company has also offered optics under its own name. Currently, Cabela's catalogs a variety of tactical and specialty riflescopes, as well as two lines intended primarily for hunters: the value-priced Pine Ridge scopes, which retail from \$49.99 to \$149.99, and the Alaskan Guide models, consisting of the Premium, XT and Rangefinding lines, with prices of \$299.99 to \$429.99. The offerings in the Rangefinding line include 3.5-10X 42 mm and 4.5-14X 42 mm models; the latter is evaluated here.

Like all the Alaskan Guide scopes, the 4.5-14X 42 mm

Rangefinding Rifle Scope is made to Cabela's specifications in Japan. Alaskan Guide scopes have 1"-diameter main tubes and all the features that one would expect from quality hunting optics: one-piece aluminum main tubes, multicoated lenses for superior light transmission, nitrogen filling to eliminate fogging, etched glass reticles, and waterproof and shockproof construction. Additional features include windage and elevation turrets with 1/4-minute clicks, a fast-focus eyepiece, and, on both rangefinding models, a saddle-mounted side-focus parallax adjustment turret. Both the windage and elevation turrets offer a generous 60 minutes of angle (m.o.a.) of adjustment (15 m.o.a. per revolution).

The most distinctive feature of our Alaskan Guide scope was its rangefinding reticle, which is designed to allow estimation of both target range and bullet drop. In addition to a standard crosshair, the reticle contains a series of four circles of descending diameter, representing an 18" target width at 200, 300, 400 and 500 yds., respectively. Etched numbers indicate the

distance associated with each circle. A short horizontal line extends from each circle to the vertical crosshair, establishing the proper aiming point for that particular distance (except for the 200-yd. circle, which is centered on the primary crosshair). The rangefinding reticle is in the scope's first focal plane, which maintains the proper apparent size of each circle regardless of scope magnification, and allows the rangefinding feature to be used at any magnification.

In use, the shooter simply brackets an 18" portion of the target (the nominal size of the chest cavity of deer, antelope, bear and the like) in one of the circles in the reticle. The circle giving the best fit indicates the approximate range to the target. The shooter then aims at the target utilizing the proper horizontal line, which should produce the proper drop compensation for that range.

Of course, in the field, the back-to-belly measurement of game animals won't always be exactly 18", and even when it is, game won't always be conveniently located so that it fits neatly into one of the rangefinding circles.

*A side-focus turret offers convenient parallax correction. Made to Cabela's specifications in Japan, the scope has a 1" tube and a black anodized finish.*