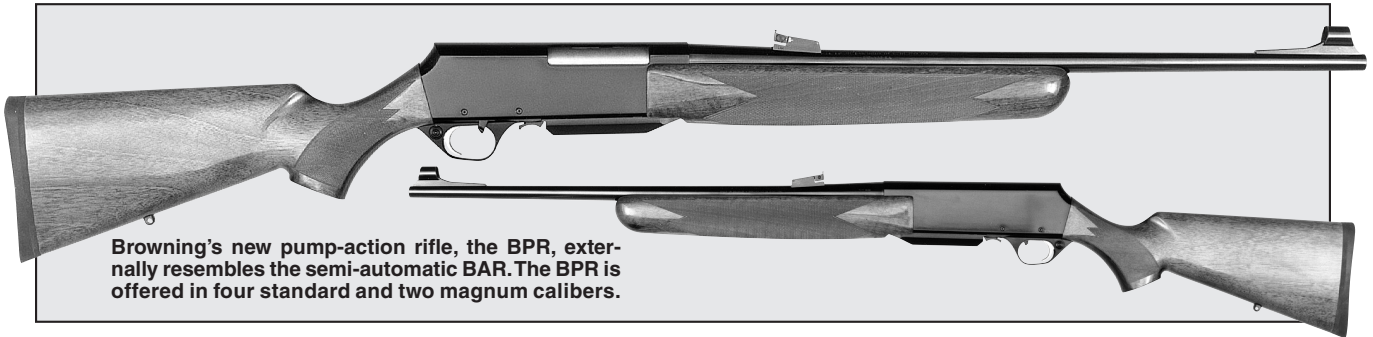


DOPE BAG

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."

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 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.

BROWNING BPR RIFLE



Browning's new pump-action rifle, the BPR, externally resembles the semi-automatic BAR. The BPR is offered in four standard and two magnum calibers.

THE elegant styling of Browning's new, BPR, center-fire, pump-action rifle is patterned after the firm's successful BAR Mark II, semi-automatic rifle introduced in 1993. Despite the imposing appearance, the BPR weighs only 7 lbs. 3 ozs with excellent balance and handling. Stock dimensions will please most owners and the comb height serves iron sight and scope sight shooters equally well.

Stocks on the Browning BPR are of finely-grained, select walnut with 20 line-per-inch cut checkering. The buttstock is fluted with a full pistol grip, rear sling swivel stud and soft, black rubber buttpad. There is no pistol grip cap, white line spacer or forward sling swivel stud. However, Browning does offer a barrel clamp front sling swivel stud at extra cost.

Barrel lengths are 22" in standard cals. and 24" in magnum cals. with a sporter contour of constant taper with a diameter of .590" at the muzzle. Button rifled in carbon steel with six lands and grooves, BPR barrels are finished with a durable, medium polish blue. Barrel-mounted iron sights are standard and combine a front blade with a gold bead on a hooded ramp with a blade rear sight having click adjustments for windage and elevation. The receiver is drilled and tapped for scope bases (those for the BAR will fit). Scopes with long tubes may require the shooter to remove the rear iron sight, though this should not be necessary with most hunting scopes.

A rotary bolt with seven front lugs in three rows locks directly to the barrel. The receiver is aluminum alloy with a hard anodized blue finish. Dual operating rods assure smooth, bind-free operation. There is a smallish, internal extractor and ejector. The floorplate of the receiver is hinged at the front, and it swings down to expose the removable, double-column, steel magazine inside. This four-round unit (three rounds in magnums) snaps into place quickly and easily via a catch on the rear of the floorplate.

The single-stage trigger assembly is held inside the receiver by two large, steel pins. When these are drifted out, the entire trigger



The BPR's trigger assembly may be removed by drifting out both retaining pins in the receiver, then pulling the unit out the bottom. This allows access to the gun's interior for routine cleaning. Browning does not recommend further disassembly.

assembly may be removed easily out the bottom of the receiver. Surprisingly, this simple task constitutes the entire user disassembly recommended by Browning. As this exposes the interior of the receiver for cleaning, further disassembly is unnecessary. Trigger pull of the rifle submitted for test was crisp, but a bit heavy at nearly six lbs.

The cross-bolt safety in the rear of the trigger guard works smoothly and silently. A small slide release lever projects downward on the right side of the trigger unit. Just in front of the trigger guard bow is a curved, grooved sliding button that releases the floorplate when pushed forward. The trigger itself is gold-plated and there is a small, gold-filled, Browning "Buckmark" logo on the outer surface of the trigger guard.

When loading or unloading the BPR, the slide must be fully forward which also closes and locks the bolt. If the slide is not fully

BROWNING BPR

MANUFACTURER: Browning, S.A.,
Place des Hauts-Sarts, B-4040
Herstal, Belgium

IMPORTER: Browning Arms Co., Dept.
AR, One Browning Place, Morgan, UT
84050

MECHANISM TYPE: pump-action, center-fire rifle

CALIBERS: .243 Win., .270 Win., 7 mm Rem. Mag., .308 Win., .30-'06 Spr. (tested), .300 Win. Mag.

OVERALL LENGTH: 39 $\frac{1}{2}$ "

BARREL LENGTH: 22 $\frac{1}{2}$ "

RIFLING: six groove, 1:10" RH twist

WEIGHT: 7 lbs., 3 ozs

MAGAZINE CAPACITY: four (magnums three)

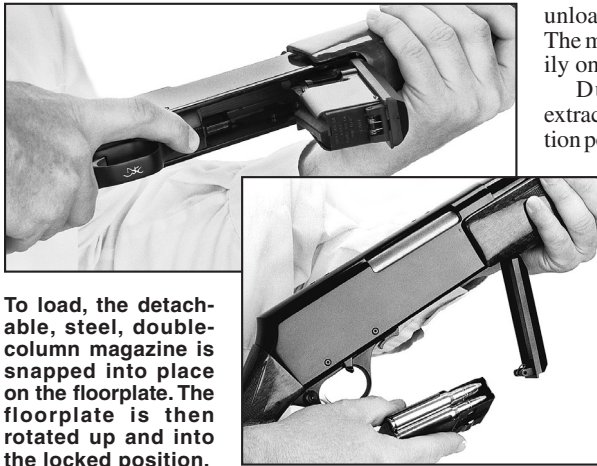
TRIGGER: single-stage, 5 $\frac{1}{2}$ lb. pull

SIGHTS: Blade with gold bead on hooded ramp front, blade rear click adjustable for windage and elevation, receiver drilled and tapped for scope bases

STOCK: Select walnut with high-gloss finish: length of pull, 13 $\frac{3}{4}$ "; drop at heel, 1 $\frac{1}{2}$ "; drop at comb, 1 $\frac{1}{4}$ "

ACCESSORIES: barrel clamp front sling swivel mount optional at extra cost

PRICE: \$689.95 (standard cals.), \$741.95 (magnum cals.)



To load, the detachable, steel, double-column magazine is snapped into place on the floorplate. The floorplate is then rotated up and into the locked position.

forward, the floorplate will not swing down far enough to clear the magazine. Because of this, it is very important to apply the safety when loading or unloading and point the muzzle in a safe direction. Single rounds may be loaded through the ejection port if the magazine is empty.

Cleaning the BPR presents no special problems, though the barrel must be cleaned from the muzzle. Therefore, care must be taken to avoid damaging the muzzle crown when inserting the cleaning rod into the gun's barrel.

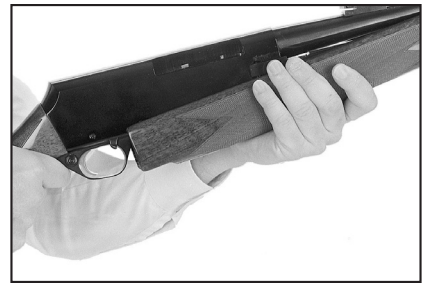
In testing, shooters praised the comfortable stock which contributed greatly to low perceived recoil even when firing 220-gr. bullets. Test personnel also commented on the smoothness of the action which, when combined with the good balance of the rifle, made fast second shots easy. Loading and

unloading was fast and simple. The magazine snaps in or out easily once you get the feel of it.

During function testing extraction was smooth and ejection positive with no malfunctions of any type. Accuracy was acceptable for a rifle of this type.


The BPR could stand a few minor improvements, however. The wood-to-metal fit at the rear of the receiver on the test rifle was not up to Browning's usual high standard. Staffers also commented on the stiffness of the floorplate release button that did not always want to latch on a full magazine.

Right-handed shooters who handled the BPR noted that the slide release lever was too



As the slide of the new BPR rifle is pulled rearward, the fore-end is cammed forward and away from the receiver. The seven lug rotary bolt locks directly to the barrel.

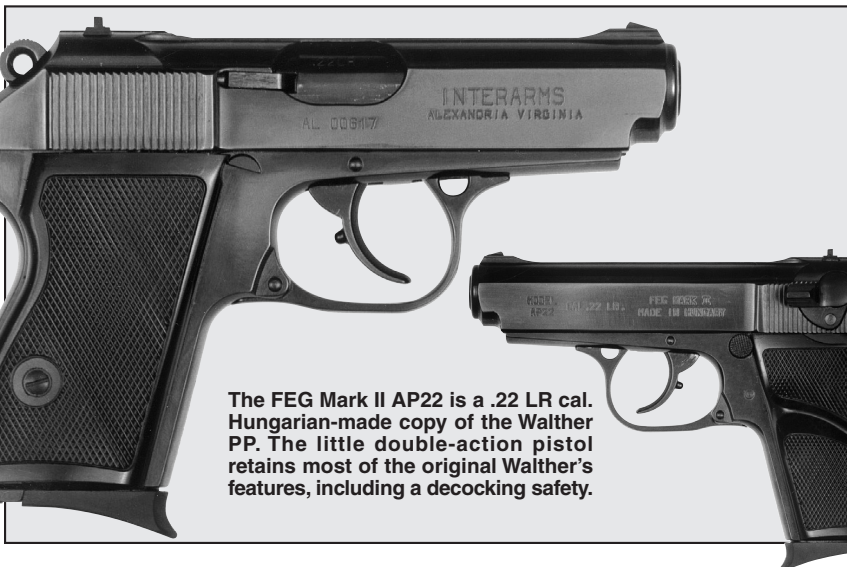
long, while left-handed shooters found it nearly impossible to operate with their left hand. A subjective call was the matte finish on the bolt—some liked it; others would have preferred a high polish finish.

Hunters who appreciate a well-made, pump-action rifle will like the Browning BPR. Its smooth action, low-perceived recoil, and comfortable handling are major selling points. Of course there is also the usual, high-quality Browning wood, checkering and stock finish. Thus, pride of ownership plays a significant part in a BPR purchase decision—as the suggested retail price is slightly higher than many bolt-actions and lower than Browning's BAR semi-automatic rifle. 

ACCURACY RESULTS

.30-'06 Spr. Cartridge	Vel. @ 15' (f.p.s.)	Smallest (ins)	Largest (ins)	Average (ins)
Win. No. X30063 150-gr. ST	2830 Avg. 6 Sd	2.48	4.04	3.02
Fed. P3006D 165-gr. BTSP	2770 Avg. 10 Sd	1.90	4.78	2.74
Lapua 185-gr. PSP	2526 Avg. 19 Sd	1.10	7.00	3.88
Average Extreme Spread				3.21
Five consecutive five shot groups at 100 yds., fired from sandbags. Abbreviations: Sd (Standard deviation), BTSP (boattail soft-point), PSP (pointed soft-point), ST (Silvertip)				

FEG MARK II AP22 PISTOL



The FEG Mark II AP22 is a .22 LR cal. Hungarian-made copy of the Walther PP. The little double-action pistol retains most of the original Walther's features, including a decocking safety.

ANOTHER pistol based on the timeless Walther PP and PPK has joined the FEG Mark II .380 APK (March 1997, p. 48) and AP in the Interarms product line, the Mark II AP22. Chambered for the .22 Long Rifle cartridge, the new AP22 is manufactured by FEG (for *Fegyver es Gazkeszulekgyara NV* or the Arms and Gas Appliances Factory of Budapest).

Walther began offering a .22 Long Rifle cal. PP in the 1930s, and these scarce rim-fire guns became prized souvenirs among G.I.s returning from World War II. Twenty-two cal. PPKs and PPs have been offered intermittently since then, though at present the only .22 Walther pocket pistol available commercially in the U.S. is the diminutive, American-made TPH. High retail prices and lack of availability cleared the way for a number of PP-based copies and clones in .22 cal. One recent unabashed copy

DOPE BAG



The FEG AP22's decocking safety is on the slide's left rear and is depressed to engage. A red dot is visible when in the "off" position.

of the PP was the Daewoo DP52 (March 1996, p. 50) imported from Korea from 1994 to 1996. At \$320, the DP52 was priced at less than half the price of the Walther original. The FEG Mark II AP22 is the latest .22 Walther clone and, oddly, is marketed by the same importer that handles the Walther product line.

In profile, the double-action, blowback-operated AP22 closely resembles a PP with a short PPK-length slide and barrel. The AP22 follows the frame design of the original, and the new .22 does not have the FEG APK's "beavertail" rear grip frame contour that some consider an improvement over the original Walther.

The 3 $\frac{3}{8}$ "-long barrel is fixed, pinned to the frame and has a thick, .145" contour at the muzzle. The rifling is six-groove with a right-hand twist of 1:9.8". Extraction is by a single hook on the slide's right. The ejector on the frame's left also holds the side open after the last round in the magazine is fired.

In operation, the AP22's trigger closely follows the Walther PP. The single right-side trigger bar acts on a "cocking piece." An arm on the tail of the trigger bar lifts the cocking piece, which in turn lifts the sear and cocks the hammer in double-action operation. When the cocking piece reaches its highest point of travel, the sear drops out of



Remove the magazine from the unloaded FEG then pull down on the front of the trigger guard. Grasp the slide and pull it rearward and up—freeing it to travel forward and off. The recoil spring may then be removed.



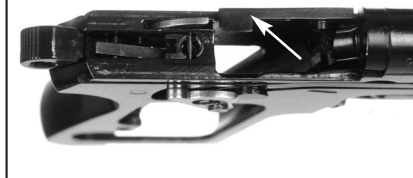
engagement, and the hammer falls. In single-action operation, a notch on the rear of the cocking piece is engaged by a projection on the base of the hammer. When the trigger is pulled the trigger bar pulls the cocking piece slightly forward and out of engagement with the hammer's tail—allowing the hammer to drop.

FEG characteristics carried over to the AP22 include a hole in the front of the trigger guard to aid in disassembly, and a trigger stop cast into the rear of the trigger blade, which is vertically grooved on its front.

The eight-round-capacity, steel box magazine has a plastic basepad that protrudes below the grip frame to aid in con-



The AP22's single right-side trigger bar (above) acts on a "cocking piece." An arm on the tail of the trigger bar lifts the cocking piece, which in turn lifts the sear and cocks the AP22's hammer.



The FEG's ejector is on the frame's right, and it also serves as a slide hold open.

trolling the little pistol. The magazine is released by depressing the non-reversible checkered button on the frame's left behind the trigger. There is no button to hold the follower down during loading, though in our experience one was unnecessary.

Stocks are of black, checkered plastic retained by a single screw. The left stock panel has a "target" thumbsheft that adds to the BATT's requisite point total. Southpaws will want to swap it out for a panel without the sheft.

Sights are a low profile .078"-wide blade on a fixed ramp front with a drift adjustable for windage open rear with an .090" square notch. A grooved 255" wide rib on the slide top drops just forward of the rear sight and rises back up at the front's ramp.

Depressing the grooved lever on the slide's left rear engages the manual safety. When in the "off" position, a red dot is revealed on the slide. The safety also serves as a decocking lever. When disen-

FEG MARK II AP22

MANUFACTURER: Fegyver es Gazkeszuelegyara NV, Soroksari ut 158, 1095 Budapest, Hungary
IMPORTER: Interarms, Dept. AR, 10 Prince St., Alexandria, VA 22314
MECHANISM TYPE: blowback-operated, semi-automatic rimfire pistol
CALIBER: .22 Long Rifle
OVERALL LENGTH: 6 $\frac{1}{16}$ "
BARREL LENGTH: 3 $\frac{3}{8}$ "
WEIGHT: 23 ozs.
WIDTH: 1 $\frac{1}{2}$ "
HEIGHT: 4 $\frac{3}{8}$ "
MAGAZINE CAPACITY: eight
RIFLING: six-groove, 1:9.8" RH twist
TRIGGER: single-action pull, 7 $\frac{1}{2}$ lbs.; double-action, 16 $\frac{1}{2}$ lbs.
SIGHTS: fixed post front, rear drift-adjustable for windage
ACCESSORIES: carrying case, cleaning rod and spare magazine
PRICE: \$269

gaged, a flat cut out on the safety drum allows the hammer to hit the rear of the firing pin. When the gun's safety lever is applied, the safety drum rotates, and prevents the hammer from hitting the firing pin. The safety also locks the firing pin in place.

The FEG Mark II AP22 was fired for accuracy with the results found in the accompanying table, and function-fired with American Eagle, Aussie Ammo, Federal, Remington, Sellier & Bellot and Winchester ammunition. There were no failures of any kind among the more than 250 rounds fired. Even when we mixed standard and high-velocity Long Rifle ammunition together in the same magazine functioning was flawless.

Fit and finish of the blued steel AP22 were far below that of Walther guns—but then again so is the price. There were machine and/or tool marks on most internal surfaces and on the slide's exterior. Those



When AP22's safety lever is applied, the safety drum rotates and prevents the hammer from hitting the firing pin. In addition, the safety locks the gun's firing pin in place.

ACCURACY RESULTS

.22 Long Rifle Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
CCI C063 Stinger HP	1183 Avg. 13 Sd	2.56	3.38	3.47
Federal 3A9495 Champion SP	931 Avg. Sd	2.27	4.37	3.66
RWS 62NC2	838 Avg. Sd	1.72	5.13	3.24
Average Extreme Spread				3.49


Five consecutive five-shot groups from 25 yds. fired from a Marcellyn Handgun rest. Abbreviations: Sd (standard deviation), HP (hollow-point), SP (softpoint).

were cosmetic and did not effect performance.

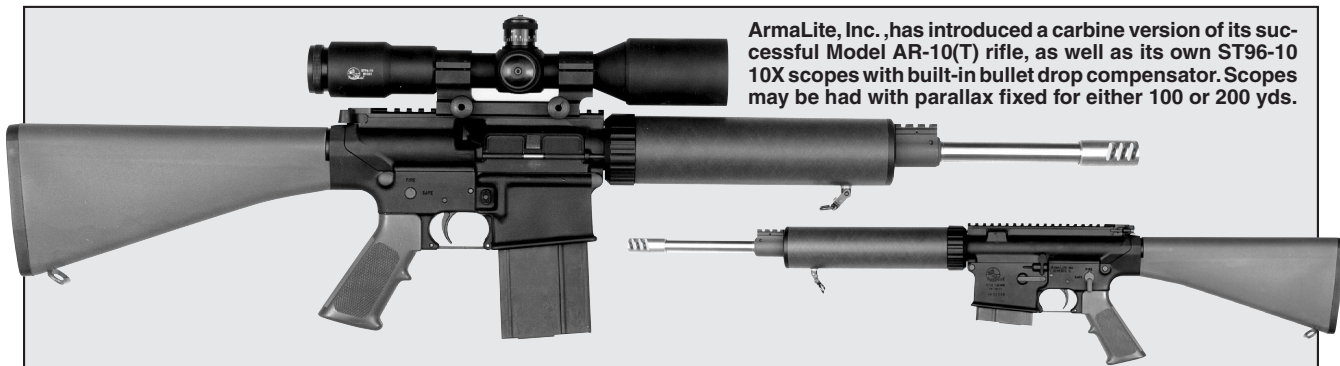
The Mark II AP22's double-action trigger pull was the main source of complaint. The 7½-lb. single-action pull had some creep, but was quite manageable. The double-action pull, however, weighed in at 16½ lbs. with the heaviest weight at the earliest portion of the pull. This was exacer-

bated by the narrow opening between the trigger and guard which left precious little room for the trigger finger.

The AP22 retains the original Walther's excellent handling and pointing characteristics, and its weight and all-steel construction were reassuring to some staffers who eschew more modern materials often employed to keep weight down. Its weight did help make the AP22 soft-shooting, too.

For those who employ the AP22 as an inexpensive, practice companion to a .380 PPK or for those who simply want the classic lines of the Walther PPK in a rimfire plinking pistol, the AP22 should serve nicely. 

ARMALITE AR-10(T) CARBINE



ArmaLite, Inc., has introduced a carbine version of its successful Model AR-10(T) rifle, as well as its own ST96-10 10X scopes with built-in bullet drop compensator. Scopes may be had with parallax fixed for either 100 or 200 yds.

ARMALITE, INC., has introduced a carbine version of its successful .308 Win. cal. Model AR-10(T) rifle (May 1996, p. 48) as well as its own 10X ST96-10 rifle scope with built-in bullet drop compensator.

With its 16¼" barrel—as opposed to a 24" tube on the rifle—the Carbine is intended more for close-in work rather than long-range competition like the rifle. The "Police Model" scope we received, too, is perhaps best suited for closer use as the bullet drop compensator is calibrated to 1000 yds., but the non-adjustable parallax is set for only 100 yds. ArmaLite does offer a nearly identical version of this scope with the parallax fixed for 200 yds.

The AR-10(T) Carbine is more than just a shortened version of the rifle. A cut-rifled, match-grade barrel that is polished and left in the white employs the 5R rifling pattern and is made by Mike RockRifled Barrels, Inc.. There is also a six-port muzzle brake permanently attached to the barrel that ArmaLite calls a "recoil check" that is not found on the rifle. The Carbine's gas system is inside the tubular handguard, but the gas tube is necessarily shortened. The gas port diameter has been reduced from

.094" to .084" since less gas is required to cycle the action due to the shortened length.

Whereas the rifle came standard with a screw-adjustable, two-stage, National Match trigger, the Carbine comes with a non-adjustable single-stage trigger set between 4½ and 5½ lbs. at the factory. A two-stage match trigger may be special ordered, but the screw-adjustable model previously offered on the rifle has been replaced on all models with a two-stage, non-adjustable, National Match unit that may be tuned in a manner similar to that used with the M1 rifle.



This tuning requires stoning and is best left to the factory or a competent gunsmith.

A flat-top with integral Picatinny rail is the only version of the ArmaLite AR-10(T) Carbine offered, though a carry handle and iron rear sight that attach to the rail may be ordered as options.

Both rifle and Carbine share the same ArmaLite (T)-type upper and lower receiver; beefed-up AR-15-style buffer with counterweights; firing pin with buffer spring; and stepped, black phosphated bolt that is chrome-plated inside for improved corrosion resistance. Many other parts are interchangeable with the AR-15 family of rifles.

The bolt locking lug opposite the extractor has been relieved at the rear so as not to contact the locking recess of the barrel extension. This design fea-

Moly-coated factory loads from Hornady and Black Hills, as well as PMC loads sprayed with Marksman's Ms. Moly coating, turned in impressive groups during the course of our testing of ArmaLite's AR-10(T) Carbine fitted with the ST96-10 scope.

ARMALITE AR-10(T)

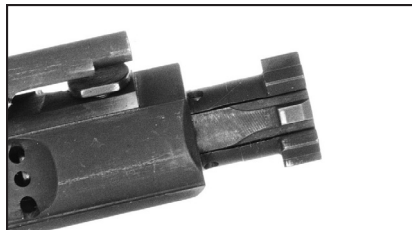
MANUFACTURER: ArmaLite, Inc., Dept. AR, P.O. Box 299, Geneseo, IL 61254
MECHANISM TYPE: gas-operated, semi-automatic, center-fire rifle
CALIBER: 7.62x51 mm (.308 Win.)
OVERALL LENGTH: 37 1/4"
BARREL LENGTH: 16 1/4"
WEIGHT: 8 lbs., 3 ozs.
MAGAZINE CAPACITY: 10
RIFLING: five-groove, 1:11 1/4" RH twist
TRIGGER: single stage, 8 lbs. pull
SIGHTS: none, equipped with integral Picatinny rail for Weaver-type mounts
STOCK: olive-drab synthetic; length of pull, 14 1/4"; drop at heel, 1/2"; drop at comb, 1/2"
ACCESSORIES: spare magazine, open bolt indicator
PRICE: \$1395

ture is to balance the load on the locking lugs when a cartridge is fired. The modification reduces the peak loading on the locking lugs adjacent to the extractor from 40% to 24% each and distributes that load to the other four lugs.

ArmaLite's AR-10(T) Carbine comes standard with two 10-round, steel, double-column magazines based on the M14-type that comply with the Violent Crime and Law Enforcement Act. ArmaLite AR-10 and U.S.-issue M14 magazines are not interchangeable, but ArmaLite does offer pre-ban 20-round M14 magazines modified for use in its firearms.

ArmaLite's ST96-10 is a 10X scope with a 30 mm diameter main tube made in the U.S. The tube is of seamless 6061T6 extruded aluminum alloy with a black, hard anodized coating inside and out. Eye relief is 3 1/2"-4", exit pupil diameter is 4.3 mm and the field of view is four meters at 100 meters. The eyepiece has a rubber edge with quick diopter adjustment from -2.5 to +2.5, but it has no lock ring.

Other features include multi-coated lenses to minimize flare and internal reflections, shockproof, waterproof, dustproof design; and large, target-type 1/4 minute click-adjustable knobs for windage and ele-

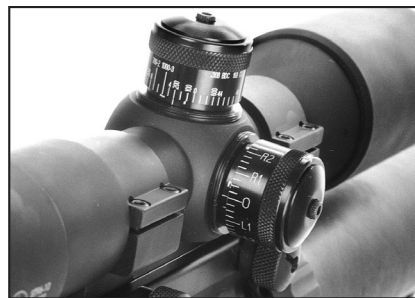


The locking lug opposite the extractor has been relieved at the rear so as not to contact the locking lug of the barrel extension. This more evenly distributes the peak load the bolt receives when a cartridge is fired.

vation with white adjustment marks. Overall length of the scope is 13", weight is 37 ozs. with the aluminum mount, and the objective and objective bell are 42 mm and 2 1/4" in diameter, respectively.

The reticle is best described as a combination mil-dot/duplex crosshair with an integral converging line rangefinder. To use the rangefinder, an object six feet tall is bracketed between the baseline and the appropriate short slashes above it, or alternatively, an object 18" wide can be matched up to horizontal slashes. The corresponding distance in yards marked on the rangefinder bracket's baseline is then noted.

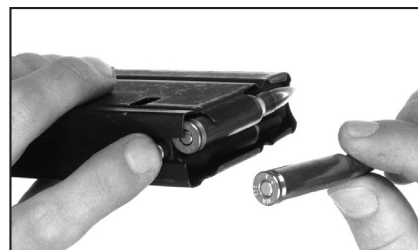
With the range to the target known in yards, the top turret of the ST96-10 scope is dialed to that range and a dead-on hold used. Complete instructions on initially calibrating the scope are included in the owner's manual. It is important to note that the bullet drop compensator on our test scope was for the 7.62x51 mm (.308 Win.) cartridge using 168-gr. bullets.



ArmaLite's ST96-10 is a 10X scope with a 30 mm main tube that is manufactured in the U.S. The tube is made of seamless 6061T6 extruded aluminum alloy with a black, hard anodized coating inside and out.

The ArmaLite AR-10(T) Carbine fitted with the ST96-10 scope was fired for accuracy with the results shown in the accompanying table. According to ArmaLite literature that came with our test gun, Black Hills moly-coated .308 Match, Federal .308M and G.I. M852 Match ammunition would give the best accuracy. Black Hills was the only brand of ammunition on the list in stock, but we stuck with ArmaLite's moly-coated recommendation by also using Hornady No. 80973 .308 moly-coated match ammunition, and sprayed Marksman's Ms. Moly coating on PMC No.308 SMB ammunition. All ammunition shot well within the factory-claimed 2" groups at 100 yds.


In further testing, the target was set at 300 yds. and the ST96-10's bullet drop compensator dialed to that distance. Black Hills' 168-gr. moly-coated match bullets were fired, and impacted



The ArmaLite AR-10(T) Carbine comes standard with two 10-round, steel, double-column box magazines. After loading the first cartridge, depress the bolt-stop plunger at the rear of the follower to load the remaining cartridges into the magazine.

about 6" below the point of aim. The compensator had to be dialed to 450 yds. for bullets to impact at the point of aim. In all fairness to ArmaLite, the scope is calibrated for use with the AR-10(T) rifle, that achieves around 300 f.p.s. more velocity than the Carbine with the same ammunition because of the longer barrel. This difference could account for the additional elevation needed with the Carbine for the 300 yd. target. The president of ArmaLite advised us that a ST96-10 scope regulated to the AR-10(T) Carbine's ballistics is under consideration at this time.

We found the recoil check considerably more than adequate. Skilled shooters were even able to fire shots while maintaining a reasonable sight picture in the scope.

The AR-10(T) Carbine combined with the ST96-10 scope with parallax fixed for 100 yds. offers excellent tactical potential. Although our test gun had a trigger pull almost twice what we would have liked, the accuracy of the Carbine actually surpassed that of the rifle we previously tested. Unfortunately, our accuracy test with the rifle was with different ammunition, so a direct comparison of the guns' respective accuracy is not possible. When equipped with the ST96-10 scope with parallax fixed at 200 yds., this rifle should give an excellent account of itself at even longer ranges. 

ACCURACY RESULTS

7.65x51 mm Cartridge	Vel. @ 15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Black Hills 168-gr. HPBT Moly-coated Match	2341 Avg. 6 Sd	1.29	1.96	1.59
Hornady 80973 168-gr. HPBT Moly-coated Match	2454 Avg. 16 Sd	0.55	1.29	.88
PMC 308SMB 168-gr. HPBT Match*	2446 Avg. 15 Sd	0.77	1.22	1.00
Average Extreme Spread				1.15

Five consecutive five-shot groups from 100 yds., fired from sandbag rest. Abbreviations: Sd (standard deviation), HPBT (hollow-point boattail), * (bullet coated with Marksman's Ms. Moly).

ITHACA MODEL 37 TURKEYSLAYER



The venerable Ithaca Model 37 is 62 years old. It has been used by the U.S. military and has been enjoyed afield by many hunters. The gun we received for testing was the Turkeyslayer—designed for the serious turkey hunter.

DESIGNED in 1936, the venerable Ithaca Model 37 pump-action shotgun remains in production 62 years later. It has performed military service all over the world and has been enjoyed afield by hunters pursuing all types of game. The Model 37 is a favorite of left-handers, as it is one of the few repeating shotguns that eject from the bottom.

Despite the success of the Model 37, the Ithaca Gun Co. has had its share of trouble, including a series of bankruptcies in the '70s, '80s and '90s. A group of local investors reopened the company in May 1996, and it is again producing the Model 37 pump-action shotgun in limited numbers.

Many variations of the Model 37 have been made over the years, including trap, waterfowl and slug guns. The variation we received for testing was the Model 37 Turkeyslayer—intended for the serious turkey hunter. True to its origins, the Turkeyslayer uses an interrupted thread barrel attachment that is further secured by the magazine nut at the end of the tubular magazine. This type of attachment is reportedly more rigid than other types, although at

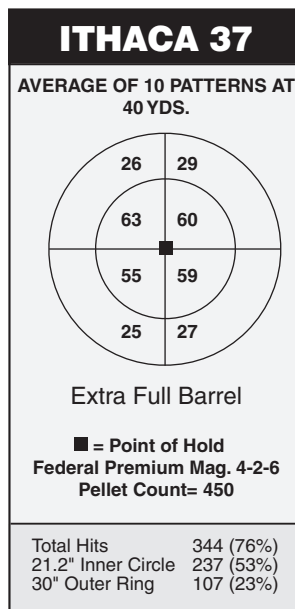
the expense of higher manufacturing costs.

Most shotguns in the same weight range as the Turkeyslayer use an aluminum alloy receiver to keep weight down. However, the Turkeyslayer retains the machined steel receiver of the original Model 37 design, and weight is reduced by using a minimal number of parts that are all lightened where possible. And since the receiver is steel, Ithaca wisely thought to drill and tap it for a Weaver No. 51 rail so a C-More sight, HoloSight or shotgun scope could be easily attached.

The shell carrier is a light, U-shaped steel piece that has two long, thin, forward-pointing fingers that double as the ejector. When chambering a shell, the carrier lifts the shell in line with the chamber and the bolt pushes the shell home. As the action locks, the carrier rises above the bolt to the top of the receiver.

On opening, the shell is grasped on its rim by dual extractors at the 12- and six-o'clock positions. Once the shell is extracted from the chamber, the carrier snaps down to eject the shell, and into position to lift a fresh one for loading.

Locking occurs at the rear of the bolt. As the action is closed, a slide at the rear of the single action bar tilts the rear of the bolt up into a matching recess in the top of the receiver.



The trigger-blocking, cross-bolt safety remains at the rear of the steel trigger guard, and is reversible for left-handers.

As its name implies, the Model 37 Turkeyslayer is marketed toward the serious turkey hunter. To that end, the gun comes equipped with a plain 22" barrel with iron sights. The rear blade is a "V" notch using a stepped wedge for elevation adjustment and is drift-adjustable for windage. The front sight has a triangular, pink, high-visibility, plastic sight blade insert that collects ambient light much like a fiber-optic sight. It stands out well against either dark or light backgrounds.

Tight patterns are a key element in bagging turkey. The Model 37 Turkeyslayer's barrel comes threaded for choke tubes, and is equipped with an extended extra-full choke. The tube is slotted so it



The Turkeyslayer uses an interrupted thread for barrel attachment that is further secured by the magazine nut. This type of barrel attachment is reported to be more rigid, though it makes manufacturing costs higher.



The 37 Turkeyslayer was patterned at 40 yds. with Federal Premium Magnum No. 6 shot. Patterns were tight, and easily moved to the point of aim using a C-More sight.

ITHACA MODEL 37

MANUFACTURER: Ithaca Gun Co., LLC,
Dept. AR, 891 Route 34-B, King Ferry,
NY 13081

MECHANISM TYPE: pump-action
shotgun

GAUGE: 12-ga., 3"

OVERALL LENGTH: 42 $\frac{3}{4}$ "

BARREL LENGTH: 22"

WEIGHT: 6 lbs., 14 ozs.

MAGAZINE CAPACITY: four

TRIGGER: single-stage, 8 $\frac{1}{2}$ lb. pull

SIGHTS: plastic blade front, open rear

step adjustable for elevation

STOCK: hardwood: length of pull, 14";

drop at heel, 2 $\frac{1}{4}$ "; drop at comb, 1 $\frac{1}{4}$ "

ACCESSORIES: choke tube wrench,
magazine plug

PRICE: \$549.95

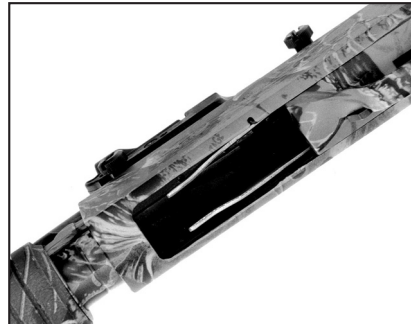
can be removed using a coin, or similar tool. Full choke in a 12-ga. has an average constriction of .036". Ithaca's extra-full choke has a total constriction of .060", or just less than twice that of a conventional full choke.

Ithaca's full-coverage use of Realtree camouflage on the Turkeyslayer provides that extra edge of concealment turkey hunters may need to get wary gobblers in close. The finish is applied by a film dip process with a clear coat protective finish. The dipping process is farmed out to Tarjac of Waterloo, New York. Patterns offered are Realtree Advantage, All-Purpose Brown, All-Purpose Grey or Xtra Brown.

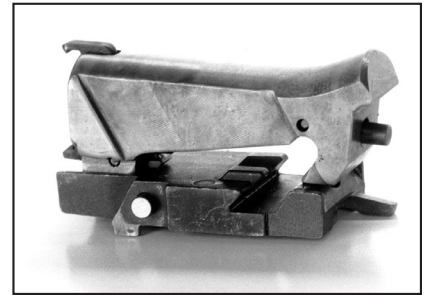
We equipped the Ithaca Model 37

Turkeyslayer with a C-More sight and patterned it at 40 yds. with 3" Federal Premium Magnum Turkey loads with the results shown in the accompanying table. Function firing was with a variety of 2 $\frac{3}{4}$ " and 3" shells varying in shot size from No. 2 to No. 6 having charge weights ranging from 1 $\frac{1}{2}$ to 2 ozs. and powder charges varying from 3 $\frac{3}{4}$ to Mag. drams equivalent. There were no malfunctions of any kind. Patterns were consistently tight and were easily moved to exactly the point of aim using the C-More sight.

With the exception of the magazine follower, front sight insert and ventilated, black, rubber recoil pad, the Ithaca Model



The Ithaca Model 37's carrier is a light, U-shaped steel piece that has two long, thin, forward-pointing fingers that double as the ejector. When a shell is extracted, the carrier snaps down to eject the shell, and into position to lift the next one for loading.



Locking occurs at the rear of the bolt. When the action is closed, a slide at the rear of the Model 37's single action bar tilts the rear of the shotgun's bolt up into a matching recess in the top of the steel receiver.

37 Turkeyslayer is entirely made of wood and steel—a welcome feature to many. The hardwood stock fit average-size shooters well, which helped control the recoil of even the 2-ozs. Magnum loads. While the stock was fine for use with iron sights, a cheek piece was needed on our gun to get the eye in line with the C-More sight.

Production of this variant is said to be limited, and there is reportedly a similar 20-ga. in the works.

While the 37's design has stood the test of time, it is an expensive model to produce when compared to other pump guns. However, the Ithaca Model 37 has proven itself reliable for decades, and the Turkeyslayer should serve a new generation of owners well, too.



NORGON AR-15 AMBI-CATCH

SOUTHPAW AR-15 shooters have always been at somewhat of a disadvantage when it comes to speedy magazine changes. The release's location, on the receiver's right side above and just forward of the trigger guard, presents no problems for right-handers as they can easily reach it with the trigger finger, but is problematic for left-handed shooters who have to shift their grip or use their weak hand.

Norgon, LLC, of Springfield, Virginia, has introduced the AR-15 Ambi-Catch, a unit that does not hinder the function of the right-hand button, but allows the magazine to be released from the left side as well. The catch is designed to work with all AR-15-type rifles and it allows left-handed shooters to release the magazine without changing hands or losing their grip—or for right handers to operate the release with their weak hand.

The Parkerized steel Ambi-Catch is designed to drop-in without full disassembly of the rifle and replaces the "stock"



The Norgon Ambi-Catch allows the magazine of an AR-15 to be released from either the left or right side. The unit replaces the "stock" magazine catch and catch shaft.

magazine catch and catch shaft. It operates on the same axis of the original release, and its slim profile helps protect against accidental depression.

To install the Ambi-Catch, first remove the magazine and ensure the rifle is unloaded. Next, depress the right side magazine release button until the magazine catch

on the left side is clear of the lower receiver. Grasp the catch and slowly rotate it counter-clockwise until it unthreads from the release button. Slowly let the catch come free of the receiver, being careful not to let the magazine catch spring shoot out of the now-empty magazine catch cutout. Depressing the release button, insert the Ambi-Catch into the hole for the catch in the lower receiver. Rotate the catch clockwise until it is threaded into the right-handed button. When the unit is fully seated, the spring will allow tension to be released from either side.

We installed the sample Ambi-Catch easily in seconds. Left-handed users liked it immediately and it functioned flawlessly. This is a well-thought-out accessory that will no doubt be welcome among those with AR-15-type rifles.

Available from: Robert H. Garrett, Norgon, LLC, Dept. AR, 7518 K Fullerton Road, Springfield, VA 22153. \$89.95 plus \$5 shipping.



RIDGELINE LINEAR ELITE



The Linear Elite line of second generation, electronically-augmented hearing protectors feature Dynamic Sound Compression that enables the wearer to clearly hear range commands and coaching instructions without cut-offs.

MOST authoritative sources would agree that the best choice for hearing protection while shooting is ear plugs with muff-type ear protectors over them. However, it is difficult to hear range commands or coaching instructions when wearing that combination.

A cure seemed at hand a few years ago with the introduction of electronically augmented, muff-type, ear protectors. These had electronic circuitry inside that enabled the wearer to hear range commands and conversation while cutting off the sound spikes that damage hearing. That they did, but they also cut off words as the sound spikes occurred. This was more than just a nuisance as range commands were sometimes hard to understand and instructors had difficulty communicating with their students. In addition, such hearing protectors were bulky, heavy and some found

them uncomfortable to wear for long periods.

Enter Ridgeline, Inc., with their new, electronically-augmented, Linear Elite hearing protectors featuring "Dynamic Sound Compression" (DSC). DSC works by maintaining a preset, internal sound level of 85 decibels (db) or less which will not damage hearing. DSC does not cut off words when a sound spike occurs. Instead, the sound spike is compressed 50% below normal conversation sound levels (about 72 db) before release so normal speech may be heard. According to company literature, DSC begins at 10 db and extends over all frequencies to provide crisp, clear, natural sound without distortion or interference. Ridgeline calls this Dynamic Sound Range (DSR).

Each Linear Elite unit is independent with its own batteries (two "N" type), electronic circuitry and volume adjustment knob. There are no wires connecting the two units. Each can be specifically tuned to the user's hearing for true, directional, stereo sound. Battery life is quoted as being a minimum of 250 hours.

We tested the Pro-Mag, Pro-Slim and Sporting Clays models. We found the batteries easy to change or install and the ear cups comfortable even when sealing around eyeglass frames. The DSC worked as advertised. Range commands and conversation could be heard clearly without cut-offs. Users accustomed to standard ear protectors felt the Pro-Mag unit was heavy. However, when we compared the Pro-Mag to another brand of electronic hearing protectors, the Pro-Mag was found to be 13% lighter. The Pro-Slim was compared with other non-electronic units and found to be only 4½-ozs. heavier, while the Sporting Clays model was actually lighter than many non-electronic units. The Sporting Clays model features a

The Ridgeline Pro-Mag model (l.) is 13% lighter than comparable first generation units. The Pro-Slim model (center) is only 4½-ozs. heavier than many non-electronic units while the Sporting Clays (r.) is actually lighter than many non-electronic protectors.



"chop side" ear cup contour to clear the high comb of shotguns and rimfire target rifles.

The Pro-Mag weighs 16½ ozs., while the Pro-Slim weighs 3 ozs. less. Both are available in either black or white. The Sporting Clays weighs 8½ ozs. and comes in black, white or green.

The Noise Reduction Ratio (NRR) of the Pro-Mag is claimed to be a very good 28 db. Ridgeline recommends these units for center-fire rifle and pistol shooting for this reason. Testers reported that the Pro-Mags worked well to reduce sound levels outdoors and, though the units were as good or better than competitive brands indoors, they felt that more attenuation was desirable inside.

The NRR of the Pro-Slim and Sporting Clays models is 21 and 20 respectively. Consequently Ridgeline recommends these units for use with .22 rimfire and shotguns only. Lack of ear clearance inside the cups was an often heard complaint.



The modular design of the Ridgeline Linear Elite series enables fast, easy repair or battery replacement. A five-year warranty is offered on the unit's electronic circuits, microphones and switches.

These electronically-augmented hearing protectors are second generation models and are lighter and more comfortable than first generation units. The DSC and DSR circuitry functions effectively to eliminate sound cut-offs so the wearer can clearly hear range instructions and conversation. Quality and reliability appear very good, and the modular design makes battery replacement or repairs fast and easy. With a five year warranty on the electronics and a modest retail price, they appear to be a good buy.

Available from: Sheldon Marketing, Dept. AR, 2191-A Resort Way South, Prescott, AZ 86301. Price: \$219.95 (Pro-Mag), \$199.95 (Pro-Slim and Sporting Clays), plus \$10 shipping.