

# DOPE BAG<sup>®</sup>

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

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.

## CZ 100 PISTOL



Modern firearms design is alive and well in the Czech Republic. An example is the new CZ 100 9 mm Luger compact pistol with a polymer frame and other advanced features.

**M**ODERN firearms design is alive and well at CZ (Ceska Zbrojovka) in the Czech Republic. An example is the new CZ 100 polymer frame, double-action-only pistol in 9 mm Luger and .40 S&W Auto. Designed for discreet carry, this modern, compact pistol offers the latest ergonomic, technical and safety features.

There are two models of this new pistol—the CZ 100 with a double-column, 10-round-capacity magazine and the CZ 101 with a single-column, eight-shot magazine. The CZ 101 is slightly lighter and smaller as might be expected. The NRA Technical Staff received an example of the former for testing.

Both models are short-recoil operated, hammerless, semi-automatic pistols available in either caliber. A linkless cam on the barrel operates the tilting barrel lock system, which has locking surfaces on both the front and rear upper quadrants of the chamber. In similar fashion to the Glock design, the fire control system operates with a striker as there is no hammer. Fire control is double-action-only (DAO) with the slide release and magazine release on the left side of the frame. There are 47 parts in the pistol.

A basic feature of the pistol is the matte black, polymer frame with integral grip panels and trigger guard similar in manufacture to other handguns of this type. External slide

rails are molded into the frame. Horizontal grooves molded into the lower front of the frame and a cutout in the trigger guard serve for mounting a laser, flashlight or other accessory. The steel parts of the fire control system can be removed for replacement or repair. A small aluminum strip molded into the right front of the frame is stamped with the serial number.

In common with other, modern pistol designs, safety received considerable attention in the CZ 100. Safety systems include the double-action-only fire control system, an automatic firing-pin safety, a disconnect and a loaded-chamber indicator on the slide. In addition, the slide is held open after the last shot and the trigger surface has fine vertical ribs to prevent slipping. There is no magazine safety.

Ergonomics also received considerable attention on the CZ 100. Grip girth and trigger position are comfortable even for persons with small

**Each CZ 100 comes with a padded carry box, steel cleaning rod, bore brush and a magazine loading tool that tames the thumb-busting aspects of loading magazines.**

hands. Both the front strap and the back strap feature molded, horizontal grooves to improve purchase. A 3 mm upward recurve at the rear of the trigger guard allows the pistol to sit comfortably low in the hand, which reduces perceived recoil. The slide has grasping grooves on each side of both the front and rear surfaces.

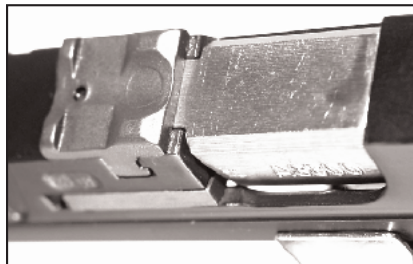
Disassembly and assembly is fast and simple without the need for special tools. The magazine release is located low in the rear of the trigger guard where it can be reached easily by most shooters. Also included is a magazine loading tool that greatly reduces the thumb-busting aspects of loading magazines.

Machined from a one-piece casting, the carbon steel slide uses a flat-coil recoil spring with a full-length polymer guide rod. As the barrel is fitted directly to the front of the slide, there is no barrel bushing. A sturdy extractor occupies the right side of the breech face while the loaded-chamber indicator occupies the left side.

Mounted in a slot on the top of the slide directly behind the breech is a blued-steel piece that at first seems to be a second rear sight. In fact it is a stop for the upper rear locking surface of the barrel. As the barrel tilts upward to lock, its upper rear surface rests against the insert, which prevents further upward travel. The insert may—but should not—be removed by depressing a lock pin in the center.

The CZ 100 has an above-average set





The CZ 100 has a unique steel locking stop on the slide behind the breech. It serves to limit the locking block's upward travel as the tilting barrel moves into its locked position.

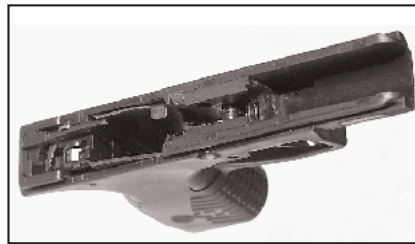
of sights. The front blade is a beefy, .123"-thick steel unit integral with the slide. Its three angled surfaces proved snag-free, and the rear plane has a large white dot. The rear sight is click-adjustable for both windage and elevation with a notch-in-blade design with two white dots. The entire low-profile unit is dovetailed into the rear of the slide. One notable feature is the white direction-adjustment arrows and callofts on the rear sight.

The blued-steel, double-column magazine holds 10 rounds for civilian use or 13 rounds for law enforcement use in 9 mm Luger. The magazine spring is a conventional "Z" type with a black polymer follower and floorplate. A thoughtful touch are the two holes on the left side of the magazine with the numbers "5" and "10" showing the number of cartridges remaining. To save weight and to limit magazine capacity, heavy, vertical indentations on each side of the magazine body eliminate the need for inserts and spac-

ers. The magazine body has two horizontal slits cut just above the top of the indentation.

The one-piece, carbon steel barrel has conventional rifling of six lands and grooves with a right-hand twist. The feed ramp is integral. The serial number of the pistol is stamped on the right side of the chamber in large letters along with a proof mark. However, the caliber is not marked on the barrel.

The CZ 100 was function fired with Hornady, Winchester, Federal, Hirtenberger, Cor-Bon and Black Hills ammunition. With more than 350 rounds fired, the only problems were two failures to fully chamber a loaded cartridge in a dirty gun. The pistol easily handled hollow-point bullets from 90 to 147 grs. without problems. Accuracy was tested with two American and one Czech brand with the results shown in the accompanying table. Accuracy with our sample CZ 100 proved to be acceptable for a 9 mm



External slide rails are molded into the sides of the CZ 100's matte black polymer frame. The steel fire control parts may be easily removed for repair or replacement.

perfectly serviceable. However this part was often singled out for comment with shooters preferring a metal guide rod. Another focus for adverse comments centered on the slits cut in the magazine, which had no apparent purpose and seemed to weaken a perfectly good design.

Although the front sight is sturdy, its integral design elicited several comments regarding its possible replacement with a dovetail design that would make it easier to install alternate front sights.

Another part that raised questions was the size of the barrel lock stop insert on the top of the slide over the breech. This part seemed needlessly large and heavy while contributing nothing to the relatively smooth overall styling of the pistol.

At 24 ozs. empty, the CZ 100 is right in the middle of the pack of contemporary, modern pistols. Perhaps CZ has missed an opportunity here. Judging from the design, another two to four ounces of weight could be removed from the pistol, greatly improving its discreet-carry attributes and moving it from the middle to the front of the competitive pack. Yet these criticisms are minor, for the CZ 100 pistol is a sound, competitive design well suited to modern tastes and preferences for discreet carry.



Disassembly of the CZ 100 is quick and easy and does not require any tools. The recoil spring employs a polymer guide rod.

Luger pistol of this type.

Empty or loaded, the CZ 100 balances well in the hand. Even empty magazines obligingly dropped clear when the release button was pressed. Both left- and right-hand shooters experienced no trouble operating the pistol and reaching all control levers. Perceived recoil was judged to be lower than average for a pistol of this type due no doubt to the low bore axis. Fit and finish were good for a semi-automatic pistol in this price range.

While trigger pull was not overly heavy, trigger travel was quite long. It could stand to be shortened about 30 percent and made crisper. The magazine release button is not ambidextrous and cannot be reversed for left-handers. Some shooters felt the front of the trigger guard was too wide and should be thinned down to improve carry characteristics. The front of the frame could also stand deforming for the same reason.

Certainly CZ has found the polymer recoil spring guide per-

## CZ 100

**MANUFACTURER:** Ceska Zbrojovka a.s., 68827 Uhersky Brod, Czech Republic

**IMPORTER:** CZ-USA (Dept. AR), 1401 Fairfax Trafficway, Building B, Unit 119, Kansas City, MO 66115

**MECHANISM TYPE:** recoil-operated, hammerless, double-action-only, semi-automatic pistol

**CALIBER:** 9 mm Luger (+P compatible), .40 S&W

**OVERALL LENGTH:** 6<sup>1</sup>/<sub>16</sub>"

**BARREL LENGTH:** 3<sup>3</sup>/<sub>4</sub>"

**WEIGHT:** 24 ozs.

**WIDTH:** 1<sup>1</sup>/<sub>4</sub>"

**HEIGHT:** 5<sup>1</sup>/<sub>8</sub>"

**MAGAZINE CAPACITY:** 10, double column

**RIFLING:** six groove, RH twist

**TRIGGER:** double-action-only with restrike, 10-lb. pull

**SIGHTS:** integral blade front with white dot, fully click adjustable rear blade with two white dots

**ACCESSORIES:** one-piece cleaning rod, bore brush, magazine loading tool, padded plastic carry case

**SUGGESTED RETAIL PRICE:** \$395 (9mm Luger), \$415 (.40 S&W Auto)

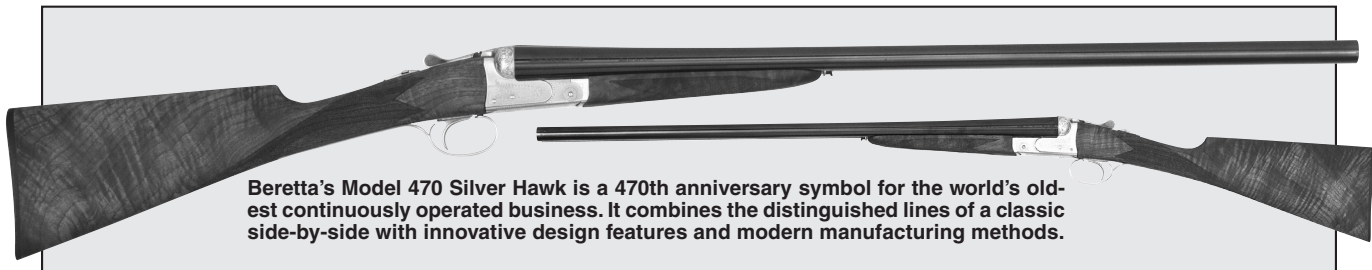
## ACCURACY RESULTS

9x19 mm Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
S&B NP3957 115-gr. FMJ	1109 Avg. 17 Sd	2.62	3.57	2.92
Federal P9HS1 124-gr. HSHP	1011 Avg. 7 Sd	3.02	4.66	3.68
Winchester SXTS9 147-gr. JHP	890 Avg. 13 Sd	3.26	3.87	3.45
Average Extreme Spread				3.35

Four consecutive five-shot groups from 25 yds. fired from Ransom Rest. Abbreviations: Sd (standard deviation), FMJ (full metal jacket), HSHP (Hydra-Shok hollow point), JHP (jacketed hollow point)

NRA

## BERETTA 470 SILVERHAWK



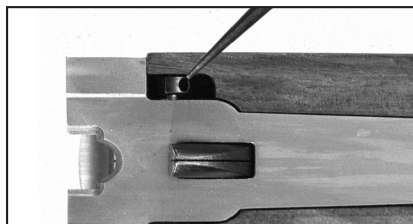
Beretta's Model 470 Silver Hawk is a 470th anniversary symbol for the world's oldest continuously operated business. It combines the distinguished lines of a classic side-by-side with innovative design features and modern manufacturing methods.

**A**T 473 years old, the Italian firm of Pietro Beretta S.p.A. claims the distinction of being the world's oldest continuously operated business. As an anniversary symbol of its success, the company introduced its Model 470 Silver Hawk side-by-side shotgun to the European market three years ago. Now it is available in America. Befitting a firearms maker of Beretta's achievements, the Silver Hawk combines the distinguished lines of a classic side-by-side with innovative design features and modern manufacturing methods.

Select walnut is used for the buttstock and splinter fore-end with a traditional satin oil finish that brings out the figure in the wood. An engraved steel tip accents the fore-end and serves as the location for the take-down push button. Hand checkering on the wrist and fore-end is in a bordered point pattern of 20 lines per inch. Our sample showed no overruns and a minimal number of flat points. Also accenting the fore-end is a small, white metal diamond centrally located in the checkering. Although it serves as a decoration, it also acts as a nut to hold the screw that retains the fore-end iron. Engineered into the iron is a small selector switch that permits the shooter to select either automatic ejection or manual extraction of fired shells.



The 470 Silver Hawk's trigger mechanism is a single, selective unit with the selector button in the tang-mounted, automatic safety button. During recoil, an inertial block sets up the 470's second barrel to fire.



Engineered into the fore-end iron is a small selector switch that permits the shooter to select automatic ejection or manual extraction of fired shells. The switch can be manipulated with any small, round pin.

Straight buttstocks are usually associated with double-trigger guns as the design facilitates sliding the hand back to the second trigger. In the case of the Silver Hawk, however, the straight, "English style" stock is for aesthetic purposes since a single, selective trigger mechanism is used. Barrel selection is by means of a button in the tang-mounted safety. Moving the selector to the left exposes one red dot so the right barrel will fire first. During recoil, an inertial block sets up the second barrel to fire.

and retracts the locking bolts arranged in Purdy double under-lug fashion. Beretta refers to this lock-up as "progressive ... to ensure solid lock-up, year after year," which reflects this system's known strength and longevity. The engagement surfaces of the lugs are machined at a slight angle so lock-up remains tight even as parts wear. They are manufactured using a process called electric discharge machining (EDM). This process uses a graphite electrode shaped the opposite of the finished metal part. Using an electrolyte solution and highly localized and concentrated spark erosion, metal is essentially melted away in the shape of the electrode with a remarkable level of accuracy and repeatability.

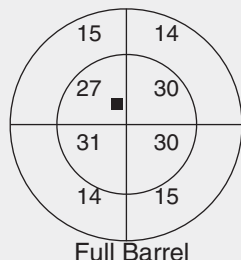
The action is a basic box-lock adorned with tasteful hand-finished engraving on all surfaces. Even the inside of the action is embellished with engine turning, save for the standing breech and hinge. The top latch has a gold-inlaid hawk's head and is checkered on both sides. Moving it to the right engages the automatic safety



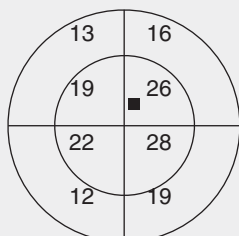
Lock-up is in the Purdy double under-lug fashion. Beretta refers to this system as "progressive," which reflects the slight angle machined into the engagement surfaces. This arrangement keeps the side-by-side's lock-up tight, even as parts wear.

### BERETTA 470 SILVER HAWK

AVERAGE OF 10 PATTERNS AT 40 YDS.



Full Barrel



Modified Barrel

■ = Point of Hold  
Sovereign Aristocrat 3¼-1-6  
Pellet count—281

Total Hits	176 (63%)	Total Hits	155 (55%)
21.2" Inner Circle	118 (42%)	21.2" Inner Circle	95 (34%)
30" Outer Ring	58 (21%)	30" Outer Ring	60 (21%)



## BERETTA 470

**MANUFACTURER:** Pietro Beretta S.p.A., Via Beretta, 18-25063 Gardone V.T., Brescia, ITALY  
**IMPORTER:** Beretta U.S.A. Corp. (Dept. AR), 17601 Beretta Drive, Accokeek, MD 20607  
**MECHANISM TYPE:** box-lock, side-by-side shotgun  
**GAUGE:** 12, 3" (tested); 20, 3"  
**OVERALL LENGTH:** 44½"  
**BARREL LENGTH:** 26", 28" (tested)  
**WEIGHT:** 6½ lbs.  
**TRIGGER:** single selective; 4 lbs. pull both barrels  
**STOCK:** select walnut; length of pull, 14½"; drop at heel, 2¾"; drop at comb, 1½"  
**ACCESSORIES:** full, modified, improved cylinder choke tubes  
**SUGGESTED RETAIL PRICE:** \$3,210

Barrels are attached to the "Beretta Block"—a monobloc system in which lightweight, cold hammer-forged barrels are fused to the bloc using lasers instead of brazing or mechanical attachment. Top and bottom ribs are solid and concave with the top

having a single, silver front bead. Both 26" and 28" length barrels are offered. At the time we received the Silver Hawk, the final design was still evolving. The gun we tested had fixed full and modified chokes, but future production guns will be equipped with Beretta's Mobilchoke system that includes full, modified and improved cylinder removable choke tubes. Bores and 3" chambers are chrome-lined, and all exposed metal parts are satin chrome plated except the blued barrels and barrel selector button.

We set the selector of the Beretta 470 Silver Hawk for manual extraction, then pattern tested it at 40 yds. using Sovereign Aristocrat ammunition with the results shown in the accompanying table. We then reset the selector for automatic ejection and function fired the gun at hand-thrown clays using a variety of field and target loads. There were no malfunctions of any kind.

Lightweight wood and barrels place the center of balance at the hinge. The lightness of the barrels caused most shooters to pull past targets at first. As they became more accustomed to the gun's handling, they were able to get on the birds smoothly and quickly.



The action is a basic box-lock with tastefully-done hand-finished engraving on all metal surfaces. Even the inside of the action is embellished with engine turning, save for the standing breech and hinge.

Overall fit and finish of the Silver Hawk is excellent. Wood-to-metal fit is a little proud, however, and the hand-cut checkering shows some unavoidable human error.

Decoration on side-by-side shotguns is usually either pretentious or uninteresting. The Silver Hawk, however, strikes a tasteful balance between these extremes and does so in a package worthy of celebrating Beretta's four plus centuries of success. **NRB**

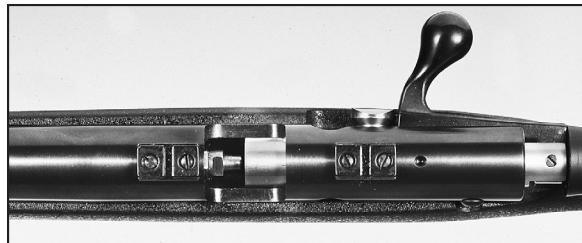
## KNIGHT T-BOLT



The latest in muzzleloading is the Knight T-Bolt rifle. If we accept, as our forefathers did, that muzzleloaders should be specialized for a given task, then this rifle is designed for the performance-minded, big-game muzzleloading hunter.

**T**HE performance of smokeless-powder arms has faded our expectations of blackpowder to the point that high performance and muzzleloading seem like an oxymoron. Few remember that

blackpowder arms established a very high level of power and performance more than 125 years ago. Baker is quoted from *The Field*, March 23, 1861, as saying, "... 200 yards may, I think, be accepted as the range required for a sporting rifle ... ." This remains true even today.



The unique feature of this new muzzleloader is a bolt that operates like the Browning T-Bolt rimfire rifle. Operation is the extent of its similarity to the Browning .22 rifle as Knight's bolt is designed from the ground up for use with blackpowder.

Just as we have specialized center-fire rifles today for varmint shooting, highpower competition or big-game hunting, muzzleloader shooters had specialized guns. Lt. James Forsyth in his 1867 book, *The Sporting Rifle and its Projectiles*, speaks of a 14-ga. hunting gun rifled at a rate of one turn in 8 ft. 8 in. that "... will throw a plain spherical ball with sufficient accuracy for all practical purposes up to 200 or 250 yards."

## KNIGHT T BOLT

**MANUFACTURER:** Modern Muzzleloading, Inc. (Dept. AR), P.O. Box 130, 234 Airport Road, Centerville, IA 52544  
**MECHANISM TYPE:** straight-pull, bolt-action, muzzleloading rifle  
**CALIBER:** .50  
**OVERALL LENGTH:** 40½"  
**BARREL LENGTH:** 22"  
**WEIGHT:** 7 lbs., 5 ozs.  
**RIFLING:** 8-groove, 1:22" RH twist  
**TRIGGER:** single-stage, adjustable, 3 lbs. pull  
**SIGHTS:** semi-buckhorn rear, adjustable for windage and elevation; ramp with high-visibility bead front  
**STOCK:** Synthetic; length of pull, 14½"; drop at heel, 2¾"; drop at comb, 2"  
**ACCESSORIES:** Knight Accessory Value Pack, instructional video  
**SUGGESTED RETAIL PRICE:** \$329

# DOPE BAG

These hunters knew their guns well, and where the ball was at every increment along its trajectory.

If we accept, as our forefathers did, that modern muzzleloaders should be specialized for a given task, then the just-introduced Knight T-Bolt rifle is designed for the performance-minded, big-game muzzleloading hunter.

This rifle has all the normal quality features inherent in Knight rifles. The barrel is from Green Mountain, the trigger is fully adjustable, the open sights feature high-visibility, the stock is made of composite material and is offered in camouflage or black, and the patented Knight's double safety system is employed.

Unique to this muzzleloading rifle is a bolt that operates like the Browning T-Bolt rimfire rifle (Jan. 1996, p. 48). Operation is the limit of its similarity to the Browning as Knight's bolt has been designed from the ground up for blackpowder. The bolt handle is an L-shaped piece pinned at the rear so the knob pivots out slightly when pulled. A ball and socket at the front of the bolt links it to the laterally acting cross-

pushed forward to enable the gun to fire.

Knight's secondary safety is a large knurled knob at the rear of the bolt. This knob is threaded directly to the striker and is screwed down to engage. When engaged, the forward movement of the striker is arrested by the safety knob impacting against the rear of the receiver before the striker can hit the musket cap.

The one-piece barrel and receiver is drilled and tapped for scope bases or a receiver sight. Sights that come with the gun are a Knight semi-buckhorn rear that is adjustable for windage and elevation and a ramped front with high-visibility white bead.

The ramrod is hollow aluminum and threaded on each end for loading and cleaning accessories.

Knight's T-Bolt is of the genre popularly called "three-pellet guns." This designation is indicative of the gun's ability to safely fire hunting loads using as many as three

50-gr. equivalent Pyrodex Pellets. The shallow, fast, 1:22"-twist rifling is best suited to shooting and stabilizing bullets in sabots, though you can still safely fire both conical bullets or roundballs.

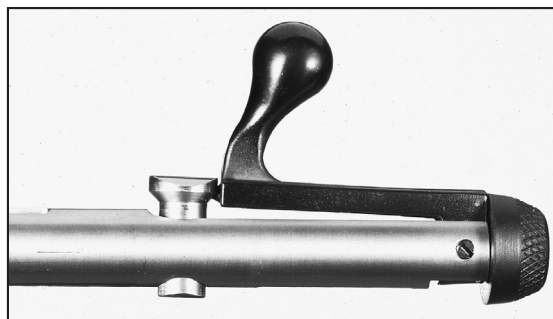
We fired the sample Knight T-Bolt for accuracy with loads that included three 50-gr. equivalent Pyrodex Pellets and Knight's own 200-gr. "Red Hot" bullet, Clean Shot blackpowder substitute

and Hornady 385-gr. hollow-base hollow-points, and Elephant-brand blackpowder with C&D Harvester's 400-gr. lead flat-point. The results of the three different loadings are shown in the accompanying table.

There were no malfunctions of any kind. We found the musket caps provided robust and sure ignition and are considerably more

convenient to handle than standard No. 11 percussion caps. Like No. 11 caps though, the musket caps are difficult to insert on the nipple through the small priming port. The difficulty of that operation is compounded when a scope is attached. We would like to see the T-Bolt's port flared for easier access.

Accuracy was respectable and good



**A ball and socket at the front of the bolt links it to the laterally acting cross-bolt. Pulling the bolt handle disengages the cross-bolt from its receiver recess. Cocking is on closing in the last 1/2" of bolt travel.**

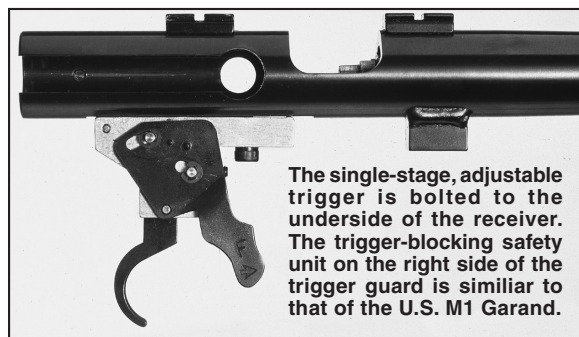
shooting was aided by the crisp, 3-lb. trigger pull. Recoil was entirely manageable, even with three-pellet loads, thanks to the T-Bolt's generous 1" thick, ventilated rubber recoil pad.

The T-Bolt concept works well with this gun and adds a margin of safety not found on standard "pull to cock" in-line rifles. That margin of safety is that the striker can be retracted from the nipple, yet remains uncocked for loading.

There are some complaints about the T-Bolt. Drop of the stock at the comb puts the shooter's eye squarely in line with the back of the receiver when a solid cheek weld is taken. Raising the head slightly to view the iron sights is a minor inconvenience. Viewing through a scope could require lifting the head entirely from the comb depending on the height of the bases and rings—or necessitate the use of a cheek pad. Additionally, the ramrod is the same length as the barrel and requires an extension (included) for cleaning.

The Modern Muzzleloading Knight T-Bolt is a quality blackpowder rifle. Like our forefathers' guns, it is specialized in design, and that design is for the performance-minded, big-game muzzleloader hunter. It combines the power and accuracy needed for tough hunting conditions with positive ignition and a modest price.

NRB



**The single-stage, adjustable trigger is bolted to the underside of the receiver. The trigger-blocking safety unit on the right side of the trigger guard is similar to that of the U.S. M1 Garand.**

bolt. Pulling the bolt handle back retracts the cross-bolt from its receiver recess so the bolt assembly can be opened for capping the nipple.

Cocking with the T-Bolt is on closing in the last 1/2" of the bolt's movement. During this operation, a squared collar around the cylindrical striker catches on the sear and the cross-bolt snaps into its cutout in the receiver.

The face of the bolt is deeply recessed to surround the "Red Hot" nipple sized to accept top hat-type musket caps commonly used on Civil War-vintage military muzzleloaders. A cut in the right side of the bolt vents gas and cap particles from the receiver on firing.

Knight's familiar, single-stage, adjustable trigger is bolted to the underside of the receiver, but the primary safety is new. Instead of a top-mounted thumb safety, the T-Bolt uses a trigger-blocking lever fashioned somewhat like that of the M1 Garand. This lever fits flush against the right side of the trigger guard and is

## ACCURACY RESULTS

.50 Cal. Load	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
C&D Harv. 400-gr. LFP 95.0 grs.* Elephant FFFg	1197 Avg. 55 Sd	2.70	4.88	3.87
Hornady G.P. 385-gr. HBHP 90.0 grs.* Clean Shot	1124 Avg. 16 Sd	4.00	5.76	4.76
Knight 200-gr. RHHP Three Pyrodex Pellets	2049 Avg. 72 Sd	3.32	5.00	4.24
Average Extreme Spread				4.29
Five consecutive five-shot groups from 100 yds., fired from sand-bags. Abbreviations: Sd (standard deviation), LFP (lead flat-point), HBHP (hollow-base hollow-point), RHHP (Red Hot hollow point) *(grains by volume)				

# CIENER .22 CONVERSION



The Ciener M1911 rimfire conversion unit consists of a 6½-oz. aluminum alloy slide, 5" Shaw match-grade barrel, recoil spring, guide rod, rubber buffer, magazine and carrying case. The finish is anodized, Teflon-coated and offered in gloss black, matte black or silver at no additional charge.

**W**hen we reviewed the Ciener M1911 Standard Conversion (April 1995, p. 59), we mentioned that a target version with adjustable sights would soon be available. We were a little optimistic about the timing of the new unit's debut, but samples we recently received seem worth the wait. They are very well made and nicely finished.

The unit is quite simple, consisting of a 6½-oz. 7075 T6 aluminum alloy slide; 5" match-grade, 4140 steel barrel from E.R. Shaw; recoil spring; guide rod; rubber buffer and 10-round magazine. Finish is mil-spec anodized, Teflon-coated and available in gloss black, matte black or silver at no extra charge. Total weight is 16½ ozs.

Installation is simply a matter of removing the .45 slide/barrel assembly and replacing it with the Ciener unit. Disconnecter and safety functions are exactly the same as they are on the M1911. Ejection is by a staked hook that protrudes rearward from the left of the breech. The large, fixed lug on the barrel

bottom is retained by the slide stop.

The front sight on the Platinum Cup is longer than the sight on the standard Ciener conversion unit. It is machined as an integral part of the slide and features serrations to reduce glare. A Millet Gold Cup target rear sight is fitted directly into the raised, serrated, flat-top rail and has click adjustments for windage and elevation. Grasping grooves are cut at an angle and the size of the ejection port is slightly smaller than that of the standard unit.

We received three Platinum Cup conversion units for evaluation: full-size gloss black, full-size silver and Commander-size gloss black. We tried the units on the following variety of frames: blued Colt MK IV/Series 70 Gold Cup National Match; blued Colt MK IV/Series 70; electroless nickel Colt Combat Commander; nickel Colt M1911A1 U.S. Army; Remington Rand M1911; stainless Springfield 1911-A1 and stainless Springfield Trophy Match. Installation was as easy as claimed for the most part, but the tolerances on the silver-finished Ciener unit were so tight it would not fit on the Colt Gold Cup or Springfield Trophy Match. It could, however, easily have been


**Installation is simply a matter of removing the existing .45 slide/barrel assembly and replacing it with the Ciener unit. The large, fixed lug on the Ciener barrel bottom is retained by the slide stop.**

lapped to fit either of the two frames.

Both the blued and silver full-size Ciener units were function fired on a Gold Cup and M1911A1 frame, respectively. Just as Ciener guarantees, high- and hyper-velocity .22 Long Rifle ammunition worked without a single failure. Out of more than 500 rounds of standard-velocity .22 Long Rifle and pistol target ammunition, there were less than half a dozen failures to fully cycle the slide. The lightweight units didn't noticeably change the handling characteristics of the M1911—effecting a negligible difference in the total weight of the gun—and they were a heck of a lot of fun to shoot.

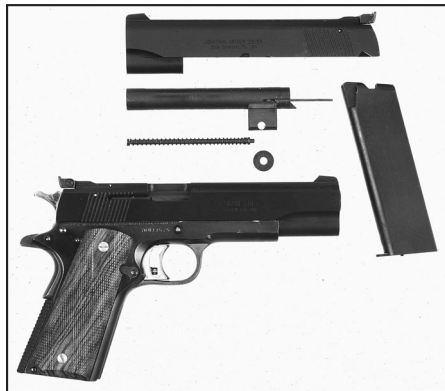
Accuracy testing was with the full-size, blue unit on a Gold Cup frame with the results shown in the accompanying table.

While the standard Ciener conversion unit we tested a few years ago was accurate enough for competition use with careful ammunition selection, the Platinum Cup unit is more forgiving and averaged 65 percent greater accuracy. Excellent accuracy of the Ciener units makes the single-frame concept more viable for shooting all three stages of a 2700 match. While non-competitors will likely choose the standard Ciener conversion unit over the Platinum Cup, many will see the value in increased accuracy and pay the slightly greater price.

Available from: Jonathan Arthur Ciener, Inc. (Dept. AR), 8700 Commerce St., Cape Canaveral, FL 32920. Price: \$249 (all finishes). 



A Millett Gold Cup target rear sight is fitted to the raised, serrated flat-top rail and has adjustments for windage and elevation.



## ACCURACY RESULTS

.22 Long Rifle Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
CCI 00051 Pistol Match	922 Avg. 21 Sd	1.08	1.24	1.13
Eley Tenex	872 Avg. 24 Sd	0.90	1.25	1.11
Federal Gold Medal Ultra Match UM1	903 Avg. 8 Sd	0.67	1.31	0.99
Average Extreme Spread				1.07
Five consecutive five-shot groups from 25 yds., fired from Ransom Rest. Abbreviations: Sd (standard deviation)				