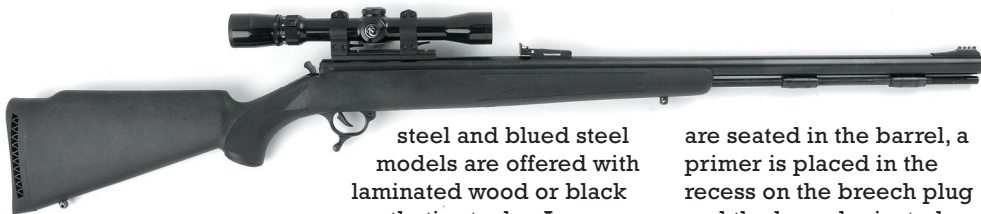




# Thompson/Center Omega Rifle

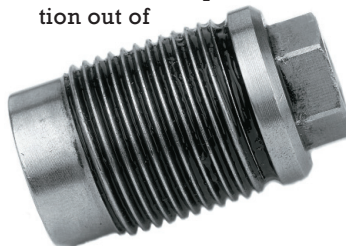


**T**hompson/Center Arms (T/C) combined decades of firearm manufacturing expertise with a clean sheet of paper to create a completely new, in-line, muzzleloading rifle for the modern blackpowder shooter seeking performance instead of tradition. Called the Omega, this new .50-cal. muzzle-loader is designed with all the latest modern features such as 209 shotshell primer ignition, sabot bullets and up to 150-gr. powder charges or three 50-gr.-equivalent Pyrodex Pellets. Both stainless

steel and blued steel models are offered with laminated wood or black synthetic stocks. A Realtree Hardwoods camouflage stock is another option. We received a blued model with black synthetic stock for test and evaluation.

The Omega has a unique, patented "lever" action with four moving parts operated by pulling a small knob on the trigger guard downward. That motion causes the swinging breech to pivot downward, exposing the rear of the barrel and the stainless steel breech plug, which has a recess for a 209-size shotshell primer. After a propellant powder charge and bullet

are seated in the barrel, a primer is placed in the recess on the breech plug and the breech pivoted into the locked position by pushing the trigger guard upward. That holds the primer securely in place and aligns it with the firing pin. For safety, the hammer then remains in the "at rest" position out of



*The breech plug is removed easily for cleaning using the supplied wrench without disassembling the rifle.*

## T/C OMEGA

### MANUFACTURER:

Thompson/Center Arms Co., Inc. (Dept. AR), P.O. Box 5002, Rochester, NH 03867; (603) 332-2394; www.tcarms.com

### CALIBER:

.50  
**ACTION TYPE:** swinging breech, in-line, muzzle-loading rifle

**RECEIVER:** blued carbon steel or satin stainless

**BARREL:** 28"

**RIFLING:** eight-groove, 1:28" RH twist

**SIGHTS:** click-adjustable fiber-optic rear, steel ramp front with Tru-Glo fiber-optic insert; receiver drilled and tapped for scope mounts

**TRIGGER:** single-stage, non-adjustable, 4 lbs. pull

**STOCK:** black synthetic, synthetic Realtree Hardwoods or gray laminated wood; length of pull, 14 $\frac{3}{4}$ "; drop at heel, 1 $\frac{3}{4}$ "; drop at comb, 1 $\frac{1}{8}$ "

**OVERALL LENGTH:** 42"

**WEIGHT:** 7 lbs., 10 ozs.

**ACCESSORIES:** cleaning jag tip, breech plug wrench, priming/depriming tool

**SUGGESTED RETAIL PRICE:** \$406

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

**WARNING:** Technical data and information contained herein are intended to provide information based on the limited experience of individuals under specific conditions and circumstances. They do not detail the comprehensive training procedures, techniques and safety precautions absolutely necessary to properly carry on similar activity. Read the notice and disclaimer on the contents page. Always consult comprehensive reference manuals and bulletins for details of proper training requirements, procedures, techniques and safety precautions before attempting any similar activity.

## SHOOTING RESULTS

.50 cal. Loads	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
Knight Red Hot 200-gr. HP Three 50-gr. Pyrodex Pellets	2060 Avg. 107 Sd	1,885	7.00	10.50	8.60
T/C Break-O-Way Sabots 240-gr. HP 90 grs. Wano Ffg blackpowder	1364 Avg. 18 Sd	992	4.50	9.00	6.04
Hornady XTP 300-gr. HP Two 50-gr. Pyrodex Pellets	1537 Avg. 36 Sd	1,574	8.74	15.00	12.58
Average Extreme Spread:					9.07
Measured average velocity for 10 rounds from a 28" barrel. Range temperature: 73° F. Humidity: 31%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations: Sd (standard deviation), HP (hollow point).					



Factory sights on the T/C Omega consist of high-visibility front and rear fiber-optic units, with the latter adjustable for windage and elevation (above l.). With the stainless steel breech plug removed, cleaning or clearing the Omega rifle is a snap (l.).



Once removed, unobstructed access to the barrel makes cleaning an easy chore. Alternately, it makes removing misfired propellant and/or bullets simple and safe.

Although the Omega rifle comes equipped with high-visibility, fiber-optic front and rear sights, the latter adjustable for windage and elevation, the receiver is drilled and tapped for scope mount bases. We chose to mount a T/C 3-9X scope on our test example as the Omega rifle is a modern design that appeals to non-traditional shooters.

Loading the Omega rifle incorporates all the modern conveniences if you choose to use them. For example, the 209 primers are easy to insert or remove with your fingers alone. T/C does provide a primer

contact with the firing pin and held firmly in place by an automatic hammer block in the fire control mechanism. To fire the rifle, the hammer is pulled rearward to the fully cocked position. That causes the hammer block to disengage and the trigger to pivot rearward inside the guard. The breechblock cannot be lowered when the hammer is fully cocked, and the hammer cannot be fully cocked when the breech is in the fully lowered position.

The breech plug is threaded into the rear end of the barrel. It is easily removed using the provided breech plug wrench or a 7/16" socket wrench.

insertion/removal tool, but we found it completely unnecessary. The Omega is rated for three 50-gr.-equivalent Pyrodex Pellets, however, it can also be loaded with loose powder if so desired. The barrel has the T/C Quick Load Accurizer (QLA) system that over-bores the bore for approximately 3" inside the muzzle allowing easy starting with virtually all types of bullets. With a twist rate of 1:28", the Omega is optimized for use with lighter weight bullets from 180 to 250 grs. Nonetheless, full bore diameter bullets such as the T/C Maxi-Ball can also be used. In the spirit of modernity, we limited our testing to sabot bullets. Pyrodex Pellets were used for the Knight and

we experienced in testing this rifle is that, occasionally, a spent primer cap would drop down inside the action when it was opened. To clear the cap then required the unloaded rifle to be held upside down and shaken. After firing each shot, we ran a patch moistened with Simple Green down the bore to remove accumulated fouling then reloaded. In this manner we were able to fire 25 rounds before the rifle needed a more thorough cleaning. We found it a good idea to wipe out the primer pocket with a soft cloth after about 15 rounds to remove soot and unburnt powder.

We particularly liked the smooth, intuitive action of the breech system and in-line breech plug design for rapid, simple cleaning and the QLA muzzle system that made bullet starting easy. The capping system also garnered praise. The only adverse comments were related to the shape of the trigger bow that felt unnaturally angular when the hammer was at full cock.

Handling and balance are very good, and we found the perceived recoil moderate with all loads of 100 grs. or less of propellant. Perceived recoil with 150-grs. of propellant was heavy, but not severe.

The only difficulty

The Omega rifle's modern styling and operation will appeal to the non-traditional blackpowder hunter seeking ballistic performance using sabot bullets, pelletized Pyrodex powder charges, reliable ignition and fast, easy cleanup.



To open the breech of the Omega muzzleloading rifle, pull the knob on the trigger guard downward. That exposes the rear of the barrel and the primer recess in the breech plug for priming.





# Taurus .45 ACP Tracker

## TAURUS TRACKER

Revolvers in .45 ACP are nothing new. The Colt and Smith & Wesson Model 1917s were introduced around 85 years ago, only half a decade after the cartridge itself was adopted by the military. Nor has the demand for such guns lessened: those originals are still highly prized by collectors and shooters alike, and more recent iterations of the breed, such as the

Smith & Wesson Model 625, don't stay long on dealers' shelves. The newest of these models is the .45 ACP Tracker from Taurus Int'l, which embodies the timeless appeal of the .45 ACP wheelgun in a compact, lightweight package with a number of innovative features.

Taurus Tracker revolvers are available in chamberings from .17 Hornady Magnum Rimfire

through .41 Remington Magnum, and feature stainless steel construction, full underlug barrels with eight ports at the muzzle, adjustable iron sights, Taurus' patented Ribber Grip, smooth target-style triggers, and the key-activated Taurus Security System. Both 4" and 6½" barrel lengths are available in some models; the latter tube has a ventilated rib allowing easy scope mounting. The .357 Mag. and .41 Rem. Mag. Trackers are available in both stainless steel and Taurus Total Titanium versions; the latter feature lightweight titanium alloy frames, cylinders and barrels with a steel barrel

*Recoil of the double-action .45 ACP Taurus Tracker revolver was light with all loads.*

**MANUFACTURER:** Forjas Taurus S.A., Av. Do Forte, 511-Cx, Postal 44, 91360-000, Porto Alegre, RS, Brazil  
**IMPORTER:** Taurus Int'l Manufacturing, Inc. (Dept. AR), 16175 N.W. 49th Ave., Miami, FL 33014; (305) 624-1115; www.taurususa.com  
**CALIBER:** .45 ACP\*  
**ACTION TYPE:** double-action revolver, swing-out cylinder  
**FRAME:** natural finish, forged stainless steel\*  
**BARREL:** 4", ported  
**RIFLING:** six-groove 1:16" right-hand twist  
**CYLINDER CAPACITY:** five  
**SIGHTS:** rear white outline notch adjustable for windage and elevation; front ramped post with red insert  
**TRIGGER:** 4½ lbs. single-action; 9½ lbs. double-action  
**OVERALL LENGTH:** 8¾"  
**WIDTH:** 1½"  
**HEIGHT:** 5¾"  
**WEIGHT:** 34 ozs.  
**ACCESSORIES:** five Stellar Clips, Taurus Security System keys, black plastic case  
**SUGGESTED RETAIL PRICE:** \$525  
 \*Other options available



## SHOOTING RESULTS

.45 ACP Cartridge	Vel. @ 15' Energy (f.p.s.) (ft.-lbs.)		Group Size In Inches		
	Smallest	Largest	Average		
Cor-Bon +P 165-gr. JSP	1193 Avg. 30 Sd	521	2.94	3.48	3.29
Remington No. 230-gr. BJHP	836 Avg. 31 Sd	357	2.08	2.58	2.34
Taurus No. 185-gr. SCHP	960 Avg. 27 Sd	379	1.46	2.39	2.04
Average Extreme Spread:			2.56		
Measured average velocity for 10 rounds from a 4" barrel. Range temperature: 88°F. Humidity: 67%. Accuracy for five consecutive, five-shot groups at 25 yds. from a sandbag. Abbreviations: BJHP (brass-jacketed hollow-point), JSP (jacketed soft-point), SCHP (solid copper hollow-point).					

liner. The Trackers are designed primarily as pack guns for hunters, campers, fishermen, trappers or anyone else who may need reliable handguns for repelling predators, taking small animals or finishing wounded game. Trackers in .357 Mag. or .41 Rem. Mag. may also be used by handgun hunters after medium game.

The new .45 ACP Tracker is somewhat of a departure from the other guns of the line in being chambered for a cartridge normally associated with self-defense rather than hunting—and a rimless pistol cartridge at that. Each .45 ACP Tracker is supplied with Taurus' Stellar Clips, a full-moon design holding cartridges in the proper spacing for the gun's five-shot cylinder.

We tested our .45 ACP Tracker at 25 yds. off sandbags with the results shown in the accompanying table. There were no malfunctions of any sort.

With an unloaded weight of about 34 ozs.—roughly equal to that of a 5"-barreled M1911 semi-automatic pistol—perceived recoil with all loads was considered relatively light by our test shooters, thanks to the eight barrel ports and the unusual-looking but effective Ribber Grip. The barrel ports also contributed to the rather minimal muzzle rise demonstrated with the various loads. Although each shooter's response to recoil is both individual and subjective, the Tracker's kick was less violent than that of an M1911 pistol of similar weight.

We found it easier to


insert loaded cartridges and remove empty cases with the Taurus Stellar Clips than with many other full-moon clips we've used. We used the same clip for all of our accuracy testing, so it got a fair amount of use; nonetheless, it didn't seem to loosen its hold on the cartridge rims. Insertion of a loaded clip into the cylinder is smooth, as is ejection of a clip of spent shells. Shell ejection is facilitated by a relieved area of the Ribber grip just to the rear of the cylinder latch.

Each cylinder chamber has a pronounced shoulder at the throat, corresponding to the position of the case mouth. We discovered quite by accident that this should

provides sufficient headspace control to reliably fire .45 ACP ammunition without the use of the Stellar clips—a useful thing to know in an emergency if a clip were unavailable. Extraction and ejection, of course, are problematic without the Clip. There was no loss of accuracy or change of group location when rounds were fired without the benefit of the Stellar Clips.

We especially liked the sight picture provided by the white-outline rear notch and red insert front

ramp, which facilitated accurate iron-sighted shooting. We also liked the slightly muzzle-heavy feel imparted by the full underlug barrel, which increased steadiness in offhand shooting.

At a size and weight not markedly different from a full-size Government Model, and with perceptibly less recoil, Taurus' .45 ACP Tracker is an excellent choice for outdoorspeople or others wanting to be prepared for two-legged predators as well as four-legged ones. 



Taurus' newest Tracker in .45 ACP has the signature features of the line (l.): extensive use of coil springs, transfer bar safety, fluted cylinder, a full underlug barrel with eight barrel ports (below l.), fully adjustable iron sights, a satin stainless steel finish and Taurus' Ribber Grip. We found that the eight barrel ports help minimize muzzle rise.



# DPMS A-22



There are folks who like the AR-15 rifle, and there are also folks who like .22 LR autoloaders. Shooters belonging to both camps should applaud the new Model A-22 .22 LR semi-automatic rifle from Defense Procurement Manufacturing Services, Inc. (DPMS). The A-22 is a blowback-operated AR-15 lookalike with a flattop upper receiver, a 16¾" long, 0.995"-diameter bull barrel and a short free-floating handguard.

While .22 LR upper receiver conversions for the AR-15 rifle are not new, the A-22 is unique in being a complete, ready-to-shoot rimfire rifle. First available

in June 2002, the A-22 simply combines a standard DPMS investment-cast lower AR-15 receiver, complete with the standard AR fire control unit, buffer tube, pistol grip and buttstock, with the .22 LR upper receiver unit that DPMS has marketed since 2000. As a result, the A-22 looks, feels and handles like its center-fire big brother. Only the A-22 markings on the receiver, and the distinctly non-AR bolt visible through the ejection port, reveal its true identity.

DPMS president Randy Luth states that the A-22 upper receiver unit can be used with just about any AR-15 lower receiver. The

.22 LR upper is still sold as a separate unit for \$449.

The secret to the A-22's functioning is its .22 LR blowback mechanism. At the front of the unit is a thick steel collar that fits around a 0.45"-diameter barrel extension, and which incorporates an integral feed ramp. To the rear of the steel collar is the cylindrical steel bolt, which rides on two round steel guide rails that are anchored in the collar in the front, and in a 0.56"-thick steel back plate in the rear. The left-side rail is surrounded by the unit's recoil spring. A roll pin protruding from the bolt's

upper surface engages the charging handle so that the action may be cocked in the familiar way.

Other features of the bolt include a recessed



The A-22's bolt consists of a front collar that fits around the barrel extension, the bolt that rides on two guide rails, one of which is also surrounded by the recoil spring, and a steel back plate having a bolt buffer mechanism.

## DPMS A-22

**MANUFACTURER:** DPMS, Inc. (Dept. AR), 13983 Industry Ave. Becker, MN 55308; (800) 578-3767; www.dpmsinc.com

**CALIBER:** .22 LR

**ACTION TYPE:** blowback-operated semi-automatic rifle

**RECEIVER:** extruded aluminum flattop upper, investment cast aluminum lower, anodized and teflon coated

**BARREL:** 16¾", phosphated

**RIFLING:** six-groove, 1:16" RH twist

**MAGAZINE:** 10-round

**SIGHTS:** none supplied; upper receiver has integral Picatinny rail

**TRIGGER:** single-stage, 6½ lbs. pull

**STOCK:** Black synthetic; length of pull, 13½"; drop at heel, 1/2"; drop at comb, 1/2"

**OVERALL LENGTH:** 34"

**WEIGHT:** 8 lbs., 6 ozs.

**SUGGESTED RETAIL PRICE:** \$649



breech face, a spring-loaded firing pin and twin claw extractors. Ejection is by way of a stamped-steel finger in the magazine that rides in a slot in the underside of the bolt and contacts the case rim after the bolt has traveled about 1.1" rearward. At the end of its travel, the bolt contacts a stiffly sprung steel recoil buffer set into the back plate of the mechanism. The entire unit is held forward against the barrel by the pressure of the standard AR-15 buffer and spring in the lower receiver.

The rifle uses the same 10-round-capacity magazine developed by Colt for its .22 LR conversion; in

fact, the magazine we received with our sample rifle had Colt markings.

The procedures for cocking and firing the A-22, as well as for operating its bolt release, magazine release and safety, are all identical to those of the center-fire AR-15, except that the bolt does not lock back after the last round and cannot be locked back manually. Disassembly is simple and familiar to AR owners. After the rear takedown pin is driven out to allow the upper receiver to pivot away from the lower receiver, the bolt and recoil assembly are slid rearward as a unit out of

SHOOTING RESULTS					
.22 Long Rifle Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches		
			Smallest	Largest	Average
CCI No. 0033 Green Tag 40-gr. solid	1005 Avg. 9 Sd	90	0.80	1.09	0.94
Federal No. 1000B GM Ultra Match 40-gr. Solid	1051 Avg. 8 Sd	98	0.55	0.78	0.62
Remington No. 6122 40-gr. Solid	1086 Avg. 25 Sd	105	1.17	1.58	1.31
Average Extreme Spread:					0.96
Measured average velocity for 10 rounds from a 16" barrel. Range temperature: 78° F. Humidity: 65%. Accuracy for five consecutive, 10-shot groups at 50 yds. from a sandbag. Abbreviations: GM (Gold Medal), Sd (standard deviation).					

the upper receiver in the same way that the AR-15 bolt and carrier are removed.

We fired the A-22 for accuracy off sandbags at 50 yds. using CCI Green Tag, Federal Gold Medal Ultra Match and Remington standard velocity target loads. We also function-fired the gun with Remington Subsonic ammunition. Sighting was accomplished via a

Bushnell Elite 4200 6-24X variable scope mounted with high Weaver Grand Slam steel rings. Reliability with all loads was excellent; there were no feeding, firing or ejection problems during our 180-round test-fire session. Our only complaint was with the trigger, which had a creepy, 6½-lbs. pull. Accuracy and velocity data are reported in the accompanying table.

Whether firing from standing, sitting or off sandbags, the A-22 was uncannily like an AR-15 in every respect except recoil. The bull barrel resulted in a slightly muzzle-heavy feel that gave additional stability in the standing position. However, a sling swivel stud on the fore-end tube to allow the use of a bipod or sling would have been a useful addition.

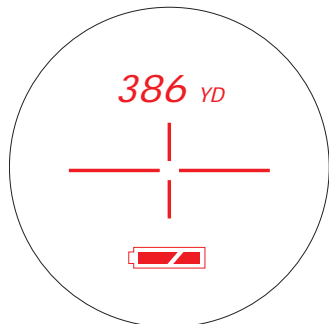
The A-22 will appeal to many shooters simply on the basis of its accuracy and dependability alone. However, its similarity in feel and function to a center-fire AR-15 makes it particularly useful to those who use ARs for NRA High Power, practical rifle or varmint shooting, and want a low-cost practice alternative to .223 Rem. ammunition.



The key to the A-22 is its .22 LR blowback mechanism, which fits into the upper receiver in the same manner as a regular AR-15 bolt and carrier (r.). The A-22's recessed bolt face has twin claw extractors (below r.). The A-22 uses a 10-round .22 LR magazine made by Colt (below). A steel finger serves as the ejector. Note that there is no forward bolt assist on the A-22 receiver (below).



# Nikon Laser 400



Nikon's Laser 400 laser rangefinder comes in matte black or Realtree Hardwoods Green. Size of the water- and dust-resistant 8x20 mm unit is only a little bigger than a pack of cigarettes and weight is less than seven ozs.



Range is displayed inside the unit as an illuminated, red LCD readout in the top of the view (top). A reticle aids in acquiring the target, and the battery status is also displayed. The Laser 400 has two operational modes—"yards" and "meters."



The mode and power buttons are conveniently located on the top of the unit where the fingers rest naturally (middle).

An adjustable diopter (bottom) allows users to adjust for a clear image and 10.1 mm of eye relief lets users sight through the unit with or without glasses.

"mode" buttons are conveniently located on the top of the unit, right under where the index and middle fingers naturally rest when using the rangefinder. Objects less than 100 yds./m away are ranged in 1/2-yd./m increments while objects farther than 100 yds./m are ranged in one-yd./m increments. An adjustable diopter allows users to adjust for a clear image, and the 10.1 mm eye relief lets users operate the unit with or without glasses. Range is displayed as an illuminated, red LCD readout in the top of the view, while an illuminated, red reticle in the view aids in aiming the unit on a target to be ranged. Battery status is also displayed.

We tested the short-range capability of the Nikon Laser 400 by simply ranging objects within the office and around the building and found the 1/2 increment laser measurements very accurate, though it couldn't range closer than 10½ yds. We then took the unit with us mountain goat hunting in northwestern British

Columbia and were equally satisfied with its long-range measuring capabilities. Indeed, we found it capable of almost instant ranging of objects as far as 508 yds. and, though there is no mention of it in the owner's manual, the unit appears capable of "scan" mode in which the operator can range on a moving object and keep the button down for continuously updated ranging information.

The Nikon Laser 400 held up well to airline travel, backpacking and the rough-and-tumble nature of mountain goat hunting without a single disappointment. And at a price that rivals that of many "cheap" binoculars, this little 8X monocular from Nikon that, by the way, incorporates a laser rangefinder, might just be the double-duty, "must have" accessory for serious mid-range shooters.

Available from: Nikon (Dept. AR), 1300 Walt Whitman Road, Melville, NY 11747-3064; (800) 247-3464; [www.nikonusa.com](http://www.nikonusa.com). Suggested retail price: \$249 (matte black), \$269 (camouflage)



**N**ikon's new Laser 400 is a compact, basic laser rangefinder made without the multitude of "modes" found on more elaborate models—and at a price that makes it hard to ignore. Two styles are offered; one is basic black while the other is a Team Realtree version that is film-dipped in Realtree Hardwoods Green camouflage. Both are 8x20 mm roof prism monoculars with a 6.3 degree field of view and incorporate FDA Class I/EN60825-1 Class 3A lasers. Size of the water- and

dust-resistant housing is only a little bigger than a pack of cigarettes, and weight is less than seven ozs. A single 3V CR2 lithium battery provides power for up to 6,000 ranges and an automatic power-down turns the unit off after approximately eight seconds. Also, there is a default to "last use" settings.

Unlike many laser rangefinder units we've seen with modes for everything from "rain" to "<100 yds.," the Laser 400 has two modes—yards and meters. Both the "power" and