

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

CAUTION: Technical data and information contained herein are intended to provide information based on the limited experience of individuals under specific conditions and circumstances. They do not detail the comprehensive training procedures, techniques and safety precautions absolutely necessary to properly carry on

NRC .DE

ROSSI 971 VRC REVOLVER

N recent years, guns featuring various types of porting or compensation have dominated in many of the "practical" pistol sports. Due perhaps to the success of such guns, as well as to such well-established systems as Mag-Na-Port and, more recently, the Schuemann Hybrid system, barrel porting has become an increasingly common option on hunting and even carry guns. Rossi's .357 Mag. 971 VRC is a new offering in this latter category.

The 971 VRC (which stands for Vent Rib Compensated) is a ported version of its 971 model, which, like all the Rossi revolver line, is based on the proven Smith & Wesson design. Heat-treated 400series stainless steel is used for all major components. The barrel and frame are forged, while the cylinder is mach-ined from bar stock. The 971 VRC offers button-rifled, ported, fully-shrouded barrels in $2^{1/2}$ ", 4", and 6" lengths. Our sample's barrel was nominally $2^{1}/2^{"}$, but measured 2.6".

ROSSI MODEL 971

MANUFACTURER: Amadeo Rossi, S.A., Rua Amadeo Rossi 143, Sao Leopoldo, RS,Brazil IMPORTER: Interarms, Dept. AR, 10 Prince St., Alexandria VA 22314 **MECHANISM TYPE:** double-action revolver CALIBER: .357 Mag. OVERALL LENGTH: 71/2" BARREL LENGTH: 25%" WEIGHT: 31 ozs. WIDTH: 11/2' HEIGHT: 51/2' CYLINDER CAPACITY: 6 TRIGGER: single-action pull, 31/4 lbs., double-action, 111/4 lbs. SIGHTS: ramped post front with red insert; rear adjustable for windage and elevation PRICE: \$375

In size and appearance the Rossi closely resembles the Smith & Wesson Kframe design, though its grips conceal a J-frame-size butt and coil mainspring.

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In both size and appearance the 971 VRC mirrors the S&W K-frame revolver family, though the Brazilian offering displays some subtle styling differences. The most salient distinguishing feature of the 971 VRC is its massive 1/2"-wide rib with its bilateral scalloped relief cuts for the gases escaping from the barrel's eight .125"-diameter ports.

The Rossi's internal lockwork offers no surprises to anyone familiar with the Smith & Wesson design. Though its frame approximates K-frame dimensions, its butt is actually J-frame size. The Rossi also uses a J-frame-type coil mainspring instead of the familiar flat spring.

The 971 VRC features the

Even with the reduction in recoil afforded by its heft and gas ports, a two-hand hold is still recommended when firing full-power .357 Mag. loads out of the Rossi. same adjustable-sight system found on other Rossi revolvers. In front, there is a blued-steel, ramped, serrated post .125" wide and .220" high, with a dovetailed red plastic insert. This is retained in the rib by a single crosspin. The adjustable rear sight is a close copy of the click-adjustable Smith & Wesson unit, but with a stainless steel body. Only





the blade is blued, and that features a .140"-wide notch outlined in white.

The 971 VRC's porting pattern (which was designed by Roy Melcher of Interarms, the exclusive importer of the Rossi line) is more complex than simply drilling eight holes in the barrel. A small expansion chamber was created by counterboring the barrel to a diameter of about .475", starting about .250" back of the muzzle and extending rearward for another .82". Thus, the rifled portion of the barrel ends a full 1.070" back of the muzzle, giving a little over 1½" of rifling. The collar created at the muzzle by the barrel



The 971 VRC features a click-adjustable white outline rear sight. Note the S&Wstyle hammer and firing pin, as well as the hammer block safety inside the frame.

counterbore has a .375" opening to allow bullet passage.

The eight vent ports bleed off gas from the expansion chamber, and are machined into the integral barrel rib in two banks of four on either side of the front sight. The ports vent gas upward and outward at an angle. Deep relief cuts in the rib immediately above the port openings provide clearance for the high-velocity gas jets.

Our sample gun had a polished stainless-steel finish and black soft-rubber stocks with molded-in finger grooves and checkering.

Fit and finish were judged to be good but not perfect: the polishing lines where the rib blended with the barrel were uneven; there were a few small tool marks at the frame/crane junction; and the sideplate showed both tiny gaps and ridges in several places where it met the frame. These were relatively minor flaws, however, that would likely not trouble many shooters, and in any event would not effect the gun's function.

Of more substantial concern were the As a result of the expansion chamber in the forward portion of the Rossi's barrel, the rifling ends an inch shy of the muzzle. sharp edges left around the front of the ejector rod shroud, barrel rib, and frame, as well as on the rear sight and rear edge of the cylinder. Sharp edges on a carry gun are not only hard on hands, holsters and clothing; they can also cause the gun to snag during presentation—a potentially fatal flaw.

The Rossi's 11¹/₄-lb. double-action trigger pull was smooth and consistent throughout, with no stacking or hesitation, and was judged to be at least as good as that of other American-made guns in its

class. Trigger return was also smooth and dependable, and seemed to be just right for fast, controllable double-action shooting. The single-action pull, as expected, was crisp and light, breaking at $3\frac{1}{4}$ lbs.

We shot the 971 VRC for accuracy with results in the accompanying table, and function-fired it with Remington, Hornady, Samson, Black Hills, Winchester, Federal and CCI .357 Mag. ammunition. No malfunctions



The Rossi's 2.6" barrel sports a full underlug and heavy, solid top rib that houses the revolver's pinned, red insert front sight as well as its eight angled compensator ports.



of any kind occurred during our testing.

The 971 VRC's accuracy level, though adequate for close-range self-defense purposes, was not quite up to that of the unported 971 recently tested here (November 1995, p. 42). Many of the VRC's groups were enlarged by one or two errant bullet impacts. It is unclear whether the porting system contributed to this in any way.

Another surprise was revealed by the chronograph. Contrary to expectations, the highest muzzle velocity average in the

ACCURACY RESULTS

.357 Mag Cartridge	Vel. @15' S (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
Federal 357B 125-gr. JHP	1124 Avg. 37 Sd	2.69	5.25	4.16
Hornady 9055 140-gr. XTP	1042 Avg. 31 Sd	3.94	6.19	4.96
Samson 357-32D 158-gr. JSP	1135 Avg. 19 Sd	3.00	6.95	5.10
Average Extreme Spread 4.74				4.74
Five consecutive 5-shot groups at 25 Yds. fired from Bansom Best, Abbreviations: Sd (standard deviation).				

Ransom Rest. Abbreviations: Sd (standard deviation), JHP (jacketed hollow point), XTP (Extreme Terminal Performance), JSP (jacketed soft-point)

Rossi was registered by the load with the heaviest bullet (the Samson 158-gr. JSP) rather than the 125- and 140-gr. slugs of the Federal and Hornady loads. Possibly the short rifled portion of the barrel performs best with heavy bullets over full-charge loads.

In any event, with around 450 ft.-lb. of muzzle energy, the heavy-bullet load tested (or its equivalent) would seem to be a good choice for a self-defense load in the Rossi.

The 971 VRC was far more pleasant to shoot than the lightweight magnum snubbies we've seen, thanks to its porting and its 31-oz. heft. Even when fired against other .357 Mag. snub-nose revolvers of similar weight, the Rossi showed less muzzle rise, proving the effectiveness of its porting.

One objection often made to barrel porting is that the flash of the burning gases directed up into the shooter's line of sight will cause the pupils to constrict, temporarily robbing one of night vision. We fired the Rossi on a darkened indoor range. Though flash did indeed come out of the ports, it was, with all ammunition tested, minimal compared to the fireball issuing from the muzzle.

While not quite as light or concealable as some magnum snub-guns, the Rossi 971 VRC offers the defense-minded shooter reduced muzzle jump and increased controllability in a mediumsized, moderately priced package. **AMT .22 MAGNUM HUNTER**



OR years the .22 Long Rifle cartridge has been popular among smallgame hunters, particularly in the heavily-populated East. The introduction in 1959 of the .22 WMRF (Winchester Magnum Rimfire)—with 600-700 f.p.s more velocity and over two times more energy than .22 Long Rifle high-velocity loadings—enabled hunters humanely to take larger animals such as fox, ground-

AMT .22 MAG HUNTER

MANUFACTURER: Arcadia Machine & Tool, Inc., Dept. AR, 6226 Santos Diaz St., Irwindale, CA 91702 MECHANISM TYPE: semi-automatic rimfire rifle CALIBER: .22 Winchester Magnum Rimfire OVERALL LENGTH: 411/2" BARREL LENGTH: 201/2 WEIGHT: 6 lbs., 9 ozs. MAGAZINE CAPACITY: 10 RIFLING: 6-groove, RH twist TRIGGER: single-stage, 4 lbs. pull SIGHTS: none supplied; receiver drilled and tapped for scope bases STOCK: black-painted hardwood; length of pull, 135%"; drop at heel, 13%"; drop at comb 13/16 **PRICE:** \$449

hog and raccoon, and to take smaller animals at longer ranges. The .22 Magnum Hunter from AMT (Arcadia Machine and Tool) marries the advantages of stainlesssteel construction and semi-auto function to the ballistic superiority of the .22 WMRF.

With the exception of its wood stock, the .22 Magnum Hunter is made almost completely of stainless steel. Both barrel and action are machined from solid 416 stainless bar stock. Other internal parts are machined, stamped or cast from various grades of stainless, with the exception of the hammer, sear and trigger bar cam, which are made from hardened tool steel.

The Magnum Hunter sports a $20\frac{1}{2}$ " button-rifled free-floated barrel in a heavy profile measuring .750" at the muzzle. The crown is recessed, target-style.

At first glance, the Magnum Hunter's black, pebble-grain high-comb stock seems to be synthetic, but is painted hardwood fitted with stainless steel sling swivels and a grooved plastic buttplate. AMT is currently working on a new synthetic stock for its Magnum Hunters, and will offer a program allowing owners of wood-stocked Hunters to purchase the synthetic one at reasonable cost. The Magnum Hunter's tubular receiver contains the bolt, hammer and hammer spring, and is drilled and tapped for scope mounts. The hammer, a hollowed-out cylinder with grooves for sear and safety engagement, sits directly behind the bolt. When a round is fired, the hammer is impelled rearward by the bolt, compressing its spring against the nylon-buffered



To disassemble the Magnum Hunter, first remove the magazine from the action and ensure that the chamber is empty (Fig. 1). Next, turn out the takedown screws (Fig. 2) and pull the action upward out of the stock.









threaded retaining cap and engaging the lip of the sear, which holds the hammer to the rear.

The bolt is a stainless steel cylinder containing a springloaded inertia-type firing pin and, at the breech end, a .070"-wide claw extractor tensioned by a plunger and coil spring. A blade welded into the left wall of the action and riding in a slot in the bolt body ejects spent cases and also serves as a bolt guide. Projecting from the right side of the bolt is a knurled cocking lever, which is also used to hold the rifle's bolt open.

To shooters accustomed to .22 Long Rifle semi-auto rifles, the AMT's action might seem like overkill, but the design was necessitated by the power of the .22 WMRF cartridge. Instead of mounting the recoil spring inside the cylindrical action body, behind

the bolt, the Magnum Hunter's spring pushes against what AMT calls an "action bar," similar to the forward portion of the bolt on Winchester Models 1905, 1907 and 1910 self-loading rifles. This 8"-long assembly consists of a single piece of stainless steel approximately .350" wide by .090" thick, bent into a U-shape and welded, at its free ends, to a $2\frac{1}{2}$ "-long steel

Fig. 4

Loosen the receiver end cap

set screw and remove the end

cap, buffer and hammer spring

(Fig. 3). Slide the hammer and

bolt out of the receiver (Fig. 4).

Turn out the two hex nuts on

the underside of the receiver that retain the magazine guide,

and remove it. Free the nose

of the action bar guide from

the detent in the forward

action screw stud and remove

both the guide and its spring

(Fig. 5). Finally, lift the action

bar free of the receiver (Fig. 6).



block. At the rear of the action bar is a tongue that engages a corresponding groove cut in the belly of the bolt. This arrangement ensures that the bolt and action bar move as one unit.

Welded to the underside of the receiver, immediately before and behind the magazine opening, are two studs. The two parallel rails of

> the action bar fit closely against the studs and slide around them. The forward end of the recoil spring and guide rod sit in a blind hole in the action bar's steel block, while the rear end bears against the forwardmost stud.

> When the bolt and action bar are driven rearward upon firing, the recoil spring is compressed between the front of the bar and the stud. The action bar is held tightly to the receiver by the magazine guide, whose mounting plate

retains the action bar rails in position under the action.

Extraction is aided by an interesting engineering trick. In a .22 WMRF blowback-operated arm, pressure can cause the case to adhere to the chamber walls, impeding extraction. In the Magnum Hunter, gas is vented from a hole just forward of the case mouth back to a spot about halfway along the length of the chamber. The gas bled into the chamber equalizes the pressure outside the case, which leads to easier extraction. This same principle has been used with success on military arms such as the G3 and FAMAS service rifles.

The "safe" and "fire" positions for the thumb safety are etched on the receiver. A red dot on the safety piece is also visible when the gun is in the "fire" mode.

We fired the AMT Magnum Hunter for accuracy with the results listed in the accompanying table, and function-fired it with CCI, Federal, Remington and Winchester .22 WMRF ammunition.

There were three failures to feed, which occurred when the lower edge of the bolt overrode the rim of a cartridge being chambered, resulting in the cartridge going only partway up the feed ramp before being crushed in the middle by the forward-moving bolt. We also found that the magazine would not be retained by its catch unless it was forcefully pushed into the magazine guide.

While we liked the Magnum Hunter's



rugged design and stainless-steel construction, there were several complaints. At the top of the list was the position of the magazine, which is not only esthetically unappealing but also interferes with the support hand in offhand shooting. A rotary or tubular magazine would seem to be the solution. Also, the gun's trigger pull, though not particularly heavy, was somewhat long and creepy. We also found the safety location inconvenient.

For those who want a rugged, accurate stainless-steel .22 WMRF semi-auto, and don't mind the gun's eccentricities, the AMT .22 Magnum Hunter deserves a close look.

ACCURACY RESULTS

ACCO				
.22 WMRF Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
CCI 0023 Maxi Mag	1705 Avg. 49 Sd	1.31	2.59	2.13
Federal .22 WMRF FMJ	1832 Avg. 23 Sd	1.26	1.48	1.35
Win. X22WMR .22 WMRF JHP	1833 Avg. 20 Sd	.88	1.61	1.19
Average Extreme Spread 1.57				1.57
Five consecutive 10-shot groups from 50 yds., fired from sandbags. Abbreviations: Sd (standard deviation), WMRF (Winchester Magnum Rimfire), FMJ (full metal jacket), Win. (Winchester), JHP (jacketed hollow-point)				





&R 1871, Inc., has dabbled in practically all types of firearms, but break-open shotguns have always been its most steadfast offering. Many of us started with break-open "kid's guns" of some kind, but eventually graduated to pumps or semi-autos.

H&R now has a serious "grown-up" break-open with its Model 980 Ultra slug gun. Like its predecessors, the 980 Ultra symbolizes the rugged simplicity we have come to know from this firm.

This slug gun differs from some others on the market in that H&R approached the project from the perspective that it was building a rifle, while many other slug guns are modifications of current-production shotguns, using the same action with a rifled shotgun barrel.

H&R reasoned that since most accurate target rifles utilize a heavy barrel, that feature could be adapted to an accurate slug gun. H&R bores its low luster blue 10-ga. barrel blank to 12-ga., then fully rifles it with a 1:35" twist. The matte black 10-ga. action is the same high-tensile-strength investment-cast steel used in the company's center-fire rifle models. The 980 uses a transfer-bar

ACCURACY RESULTS

12-ga. slug Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)	
Winchester X12R515 1 oz. HPRS	1578 23 Sd	2.18	2.82	2.63	
BRI 445-gr. SPSB	1276 18 Sd	.93	1.78	1.43	
Federal Premium P154R 450-gr. HPSB	IS 1385 18 Sd	1.06	1.66	1.38	
Average Extreme Spread	b			1.82	

Average Extreme Spread

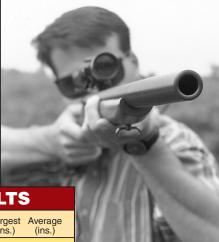
Five Consecutive 5-Shot Groups at 50 yds. Fired From Sandbags.Abbreviations: Sd (standard deviation), HPRS (hollowpoint rifled slug), SPSB (shock point saboted slug), HPSB (hollow-point saboted slug)

safety system that greatly reduces the chance of an accidental discharge from a blow to the hammer, or a dropped hammer during the cocking process.

The sample received here for testing came with a dark walnut-stained American hardwood Monte Carlo stock, complete with sling swivels and a ventilated recoil pad, though without checkering.

A reversible extension is attached to the hammer to permit easy cocking with a scope attached. The pushbutton break-open latch is to the right of the hammer.

No sights are provided with the 980



A front view illustrates the verv thick barrel walls that make the Model 980 barrel so stiff and heavy. Few, if any, slug-barreled shotguns have before now offered this much accuracy with so low a retail price tag.

H&R MODEL 980

MANUFACTURER: H&R 1871, Dept. AR, 60 Industrial Rowe, Gardner, MA 01440 MECHANISM TYPE: break-open, singleshot shotaun GAUGE: 12, 3' OVERALL LENGTH: 39" BARREL LENGTH: 24" WEIGHT: 9 lbs., 8 ozs. RIFLING: 8-groove, 1:35" RH twist TRIGGER: single-stage, 4 lbs. pull SIGHTS: none, equipped with Weaverstyle scope base STOCK: American hardwood, length of pull, 141/8"; drop at comb, 11/4"; drop at heel 13/4 ACCESSORIES: black nylon sling, reversible hammer extension PRICE: \$224.95

Ultra, though it does come with a factorymounted Weaver-style scope base.

The 980 Ultra is a hefty gun, weighing in at just under 10 lbs., half of which is the barrel. In fact, the barrel alone weighs only a few ounces less that the firm's complete .410 break-open shotgun. To counterbalance the weight of the barrel and help dampen felt recoil, an 8" piece of steel round





stock weighing $1\frac{1}{2}$ lbs. is retained in the buttstock.

For the one-gun shooter, H&R offers a factory retrofitted 10-ga. shotgun barrel with screw-in chokes.

Takedown of the Model 980, as with other H&R and New England Firearms single-barrel shotguns, is accomplished by turning out the single Phillips-head screw from the fore-end, allowing it to be lifted off, and tipping the barrel out of the action. No further disassembly should be required for routine cleaning or maintenance. Reassembly is in reverse order.

The 980 Ultra was fitted with a Leupold Vari-X 3-9X Compact scope and fired for accuracy using saboted and Foster-style slugs with the results shown in the accompanying table. During function firing, the only problems experienced were with an old batch of foreign slugs whose primers pierced when fired. This was clearly a problem with the



ammunition, not the gun. The action safely directed the hot gases out around the face of the breech away from the shooter.

Recoil was tolerable, even after firing nearly 100 slugs in a single shooting session. The trigger broke clean at 4 lbs., further aiding the gun's accuracy.

At the "Dope Bag" we routinely shoot slug guns for accuracy at 50 yds. The groups fired from the 980 made us consider extending the range to 100 yds.

The H&R 980 Ultra offers accuracy above and beyond what one would normally expect from a gun in its economical price range. If you've been considering a slug gun, and think you can handle carrying the weight of this one, it's worth a look.

An extended hammer spur helps make cocking easier when a scope is mounted on the Model 980's installed Weaverstyle base. A transfer-bar safety system helps top prevent accidental firing.

ANSCHUTZ ACHIEVER RIFLE



E were first introduced to the Anschutz Achiever in the late '80s as the firm's attempt at a starter gun for both young hunters or silhouette shooters and for conventional smallbore rifle target shooters (June, 1987, p. 58).

The Achiever line has now been increased with the introduction of the single-shot ST-Super Target. While the ST retains the general appearance of the Achiever, some of its features are notably different.

The larger hardwood stock retains the standard rifle-type adjustable buttplate that uses up to four spacers to adjust length of pull from $13^{1}4''$ to $14^{1}4''$ as the shooter grows. To change spacers, loosen the screw located in the center of the buttplate which permits the buttplate to be moved up and down, thus providing access to the two retaining screws in the butt. After

ANSCHUTZ ST

MANUFACTURER: J.G. Anschutz, GmbH, P.O. Box 1128, D-7900 Ulm, Donau, Germany

IMPORTER: Precision Sales

- International, Dept. AR,. Box 1776, Westfield, MA 01086
- MECHANISM TYPE: single-shot, boltaction rifle

CALIBER: .22 Long Rifle

OVERALL LENGTH: 38³/4"-39³/4"

BARREL LENGTH: 22

- WEIGHT: 6 lbs., 4 ozs.
- RIFLING: eight-groove, RH twist

TRIGGER: two-stage adjustable, 1³/₄ lbs. pull

- SIGHTS: globe front, click-adjustable diopter rear
- STOCK: European hardwood: length of pull, adjustable—13¹/₄" to 14¹/₄"; drop at heel, 3/4"; drop at comb, 1/2"
- ACCESSORIES: spacers for length of pull adjustment, Anschutz Sight Set No. 1 or 2.
- PRICE: \$538.50

removing the retaining screws, the buttplate can be pulled off and spacers added or taken away as needed.

The fore-end has six ventilating slots and includes a $13\frac{1}{2}$ " integral accessory rail secured by three wood screws. The fore-end and pistol grip are stippled, providing a non-slip surface.

The ST stock is attached to the barreled action by a pair of screws in the same fashion as the Achiever. A third screw retains the simple steel trigger guard.

The action is similar to the Achiever's except the ST deletes the five-round magazine in favor of single-shot operation. The trigger is the same No. 5066 twostage unit found on the Achiever and has adjustments for first and second-stage takeup that require a very small metric wrench. Pull weight is adjustable by a qualified gunsmith.





The receiver is grooved for scope mounting, and came from the importer with an Anschutz Sight Set No.1 consisting of an aperture peep rear and globe front.

The rear sight slides easily onto the dovetail and is held securely in place by three set screws. It is click-adjustable for windage and elevation in 1/4 m.o.a. increments, and once it is sighted in, settings can be locked in place with set screws.

The globe front sight retains its element under spring tension. Aperture and post elements are available from the

ACCURACY RESULTS

.22 Long Rifle Cartridge	Vel. @15' (f.p.s.)	Smallest (ins.)	Largest (ins.)	Average (ins.)
RWS Match	990 Avg. 6 Sd	.75	.93	.81
Eley Club	999 Avg. 14 Sd	.21	.66	.40
Federal Hi-Power	1263 Avg 17 Sd	76	.99	.86
Average Extreme Spread .69				
Five Consecutive 10-Shot Groups at 50 Yds. Fired From Sandbags. Abbreviations: Sd (standard deviation)				

Though it is intended for youngsters, adults were able to shoot the Acheiver well, thanks to the adjustable pull length of its buttstock. Ejection was fairly weak, and the trigger was not up to the usual high Anschutz standards.



importer, and are quickly changed by inserting a finger in each end of the sight and compressing the spring. Once the spring is compressed, tension is relieved

> from the element so that it may be lifted out through the top of the sight.

The Achiever ST was fired for accuracy with results shown in the accompanying table, and function-fired with a variety of foreign and domestic ammunition. Functioning was good, but we found ejection to be weak, and this weakness was more evident when a scope was mounted. Additionally, the trigger was not what we would expect



The sights include a globe front that accepts interchangeable post or ring apertures. The rear sight has quarter-minute adjustments that can be locked in position.



from Anschutz. First-stage takeup was fine, but second-stage was somewhat rough and creepy.

The Achiever ST provided excellent accuracy for its price range, and offers growth potential for youthful shooters. It should be especially popular for junior rifle clubs with beginner programs.

RCBS TRIM MATE

N recent years RCBS has targeted the serious, accuracy-minded handloader with products like its Case Master. RCBS continues that effort with the introduction of the Trim Mate Case Prep Center.

The Trim Mate offers five rotating geardriven stations to speed up a variety of case prep tasks. Supplied with the unit are tools to perform case mouth chamfering, case mouth deburring and primer pocket cleaning (for small and large primer pockets).

Small- and medium-size case neck brushes are installed at two non-rotating stations, and a quantity of dry case lube is also supplied. Optional items include a flash hole deburring tool, primer pocket uniformers and military crimp removers. All tools attach by way of threaded 8-32 shafts, and are interchangeable among the various stations. As tested, our Trim Mate came with the standard tool heads for primer pocket cleaning and case mouth chamfering and deburring. Also installed were the optional large primer pocket uniformer and military crimp remover. In operation, the Trim Mate's geared motor drive provided enough torque to keep the machine from "bogging down" even when considerable pressure was applied. Only a light touch was required for chamfering and deburring. The virtues of the Trim Mate were evident at the primer pocket uniforming and crimp removal stations, where it made quick work of a large number of military .30-'06 cases.

The Trim Mate Case Prep Center will be a boon to those serious handloaders who have boxes full of cases to prep.

Available from: RCBS, Dept. AR, Box 856, Lewiston, ID 83501. Price: \$99.95.

