Ruger New Model Single-Six .17 HMR

.17 HMR SINGLE-SIX

MANUFACTURER: Sturm, Ruger & Co., Inc. (Dept. AR), One Lacey Place, Southport, CT 06890; (520) 541-8820; www.ruger.com
CALIBER: .17 HMR
ACTION TYPE: single-action, rimfire revolver
FRAME: blued, investment cast, carbon steel
BARREL: 6" blued carbon steel
RIFLING: six grooves, 1:9" RH
CYLINDER: six-shot capacity, carbon steel
SIGHTS: front fixed blade on ramp, rear click-adjustable for windage and elevation
TRIGGER: single-stage, 4½ lbs. pull
OVERALL LENGTH: 11 13/16"
WIDTH: 1½"
HEIGHT: 5¼"
WEIGHT: 36 oz.
ACCESSORIES: gun lock, lockable plastic carry case
SUGGESTED RETAIL PRICE: $389

As a counterpoint to its bolt-action and lever-action rifles chambered for the new .17 HMR cartridge, Ruger now offers its classic New Model Single-Six single-action revolver in this popular new caliber. Initially available only in blued carbon steel with a 6" barrel, walnut grips and an adjustable rear sight, stainless steel models can be expected to follow.

Ruger Single-Six revolvers are manufac-

By chambering the new .17 HMR cartridge in its New Model Single-Six revolver, Ruger has raised plinking, pest control and varmint hunting to a higher performance level while maintaining the appeal of a classic design.

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."

SHOOTING RESULTS

.17 HMR Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches Smallest	Largest	Average
Hornady No. 83170 17 gr. V-Max	1925 Avg. 16 Sd	140	1.64	2.07	1.80

Measured average velocity for 10 rounds from a 6" barrel. Range temperature: 81° F. Humidity: 50%. Accuracy for five consecutive, five-shot groups at 25 yds. from a sandbag. Abbreviations: Sd (standard deviation).

tured entirely in the United States from traditional materials, such as steel and walnut with Old Western DNA readily apparent in their features, styling and operation. Over the years, the rimfire Single-Six has transcended its image as "little brother" to the center-fire Ruger Blackhawk and developed a solid following in its own right.

The Single-Six revolver remains a popular, best-seller today in .22 LR, .22 WMR and .32 H&R Mag. In 2002, when the new .17 HMR cartridge burst on the scene, the Single-Six became a natural for it.

But, would the new .17 HMR cartridge prove compatible with revolvers? Two potential problems came to mind: First, what effect would the short revolver barrel have on ballistics of the high- performance .17 HMR cartridge? Would velocity drop off to the point of ballistic uselessness?

Second, necked cartridge cases have a history of causing problems in revolvers. When fired, such cases set back in the chambers against the recoil shield, causing the cylinder to drag or lock up. When the NRA Technical Staff received a Single-Six in .17 HMR for test and evaluation, answering those questions occupied a major part of our testing.

After an initial inspection, preliminary cleaning and lubricating, we began by firing the New Model Single-Six from a sandbag rest at 25 yds. for accuracy. Group sizes averaged 1.80", which we judged very good for a sporting revolver of this type.

Our Oehler chronograph measured muzzle velocity of the 17-gr. V-Max bullets from the 6"- barreled Single-Six at 1925 f.p.s. with 140 ft.-lbs. of energy. From earlier tests in rifles, we measured muzzle velocity of the .17 HMR at 2550 f.p.s. with 246 ft.-lbs. of energy. Although these figures indicate a 23 percent decrease in velocity, the reduction remains consistent with .22 WMR ammunition fired from handguns (1910 f.p.s. from rifles dropping to 1480 f.p.s. from handguns).

We then fired several hundred rounds of Hornady ammunition through the Single-Six without cleaning to see if fired cases would stick in dirty chambers, causing drag on the cylinder. We experienced no problems in that regard. We also noted that extraction of fired cases remained fast and easy. In the past, .17-cal. guns have proven sensitive to fouled or dirty bores, thus requiring frequent cleaning. To test this, we purposely allowed the bore of the Single-Six to become quite dirty, however, we noted no significant decrease in accuracy.

Bullet trajectory of the .17 HMR was noticeably flatter than .22 rimfire ammunition, challenging shooters to test their plinking skills at longer handgun ranges. Ruger's Single-Six proved equal to such entertaining and instructive exercises

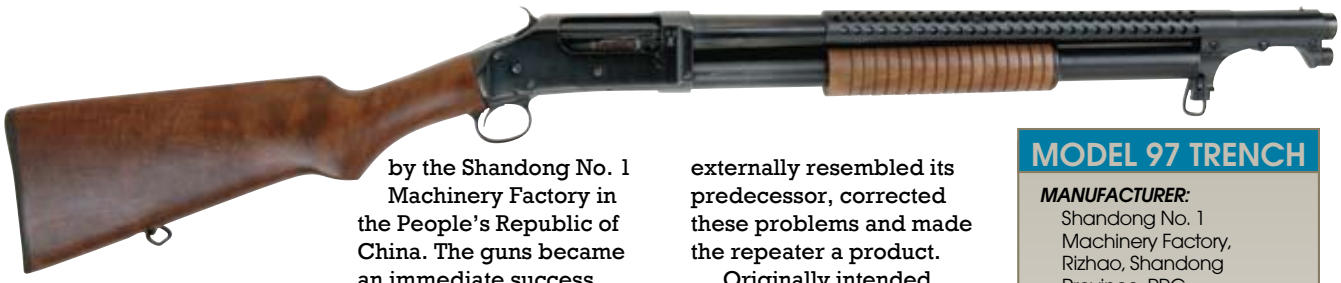
By chambering the new .17 HMR cartridge in its New Model Single-Six, Ruger has raised plinking, pest control and varmint hunting to a higher performance level while maintaining the appeal of a classic design.

Perceived recoil of the .17 HMR New Model Single-Six was nominal. Bullet trajectory of the .17 HMR was noticeably flatter than .22 rimfire ammunition, challenging shooters to test their plinking skills at longer rimfire handgun ranges. Ruger's Single-Six proved equal to such entertaining and instructive exercises.

Some years back, Ruger engineers redesigned the Single-Six to incorporate a transfer bar safety system (above), which prevents the hammer from striking the firing pin unless the trigger is pulled. The transfer-bar gun is called the "New Model Single-Six." Ruger continues to offer a free upgrade of older models. We fired several hundred rounds of Hornady .17 HMR ammunition through the revolver without cleaning to see if fired cases would stick back in dirty chambers, causing drag on the cylinder. We experienced no problems in that regard.

The Interstate Arms Model 97 "Trench Gun" is a faithful remake of the classic military-issue Winchester. Operation is identical, and there is even a U.S. Ordnance marking on the receiver's right side (below r.).

Interstate Arms Model 97 Trench Gun



The 12-ga. "Trench Gun" was one of the most controversial arms of the First World War. While several different makes and models were used in that conflict, the Winchester Model 97 was undoubtedly the most common. In recent years the Model 97 has been a hot item with Cowboy Action shooters—so popular, in fact, that demand far exceeds the supply of shootable originals.

To answer that demand, a few years ago Interstate Arms had copies of this famous pump gun made by the Shandong No. 1 Machinery Factory in the People's Republic of China. The guns became an immediate success, and now the company has followed up with a trench gun version for the military arms enthusiast.

Pump-action shotguns were manufactured prior to the Model 97, such as the Spencer and the Burgess, but the Winchester entry was really the first gun of its type to adequately handle smokeless powder shells. Actually the basic premise of the gun came out a few years earlier with the Model 93, but despite being designed by John Browning, it was plagued with mechanical difficulties. The Model 97, which externally resembled its predecessor, corrected these problems and made the repeater a product.

Originally intended as a sporting arm, soon riot guns with 20" barrels were offered. In pretty short order the U.S. military recognized the gun's attributes, and, as early as 1916, purchased some for use on the Mexican Border. When America entered World War I, thousands went to France for use behind the lines and in the trenches. The guns were so effective in close combat, the Germans complained and threatened to execute any Yank found with one. The Americans countered the threat by warning that for every American

MODEL 97 TRENCH

MANUFACTURER: Shandong No. 1 Machinery Factory, Rizhao, Shandong Province, PRC
IMPORTER: Interstate Arms, (Dept. AR) 6 Dunham Road, Billerica, MA 01821; (978) 667-7060; intarms@rcn.com
MECHANISM TYPE: pump-action, repeating shotgun
GAUGE: 12, 2¾"
FINISH: blued
MAGAZINE: tubular, five-round capacity
OVERALL LENGTH: 39½"
BARREL LENGTH: 20"
WEIGHT: 8 lbs.
TRIGGER: single stage: 7 lbs. pull
SIGHTS: bead front
STOCK: American walnut: length of pull, 14"; drop at heel, 3"; drop at comb, 2"
SUGGESTED RETAIL PRICE: $425

One of the biggest criticisms of many Chinese-made arms has been the use unattractive locally grown hardwood. The new Model 97 "Trench Gun" sports a stock and fore-end of attractive American walnut. Sling swivels of the right pattern are included, although the plastic buttplate does not bear the Winchester logo as do the original military-issue Model 97s.

executed a German would be similarly dealt with. No more gripes were heard from the Kaiser.

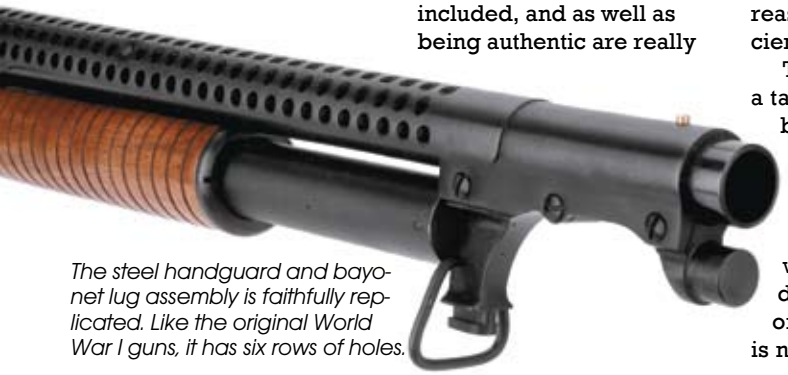
Interstate Arms' Model 97 is a faithful copy of the Winchester used during the Great War. It has all of the parent scattergun's features, including dual extractors on both sides of the bolt for a more positive extraction and a half cock hammer safety true to the spirit of the original.

The underbarrel tubular magazine holds five $2^{3}/_{4}$", 12-ga. shells that are loaded through the bottom of the receiver. To chamber the first round, all the shooter has to do is push the slide to the rear and move it forward. This also cocks the gun, readying it for firing. If one wishes to unload the magazine without operating the action, he simply pushes in on two buttons on the lower portion of the receiver. This moves a pair of retaining bars away from the shell bases, and the magazine spring pressure does the rest, ejecting the cartridges energetically from the magazine. A button on the right rear of the receiver unlocks the action and allows the shooter to work the action without having to drop the hammer.

The gun comes with a proper period-style ventilated sheet steel metal handguard, complete with a stud for the attachment of a British Pattern 14 or U.S. M1917 bayonet. The handguard is even pierced with six rows of holes, as per World War I specs. (Those guns made during World War II had four rows.) One nice touch is a faithful copy of the "U.S." and Ordnance bomb stamped just forward of the ejection port.

Unlike many Chinese guns that are fitted with a rather unattractive, locally grown hardwood, the Interstate Arms Model 97 is stocked with nicely formed American walnut that was sent to the Shandong plant from the United States. The fore-end is incised with parallel narrow grooves to permit a firm grip, and the pistol grip style butt is smooth.

A matte-black checkered plastic buttplate approximates the original's hard rubber fixture without, of course, the trademarked Winchester logo. Sling swivels are included, and as well as being authentic are really necessary if you want to kit up your shotgun with a correct Model 1907 sling or other aftermarket strap.



The steel handguard and bayonet lug assembly is faithfully replicated. Like the original World War I guns, it has six rows of holes.

Finish of the gun is a dark blue, with some plum-colored appointments. General quality of the 97 is good, but as with many arms coming from China where much semi-skilled handwork is still being done, final polish and forming can be somewhat indifferent, and file marks and rough final work were noted on our test 97. Frankly this sounds worse than it really is. Neither the overall appearance nor functioning of the gun was affected by these lapses.

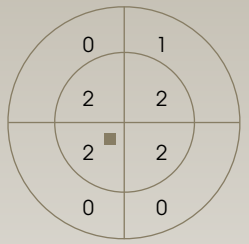
The Interstate Model 97 was function-fired at trap, skeet and five-stand with no failures of any kind. We decided to stick with buckshot for our patterning results, in keeping with the gun's original mission. We used plastic Federal Classic 00 buck in the test. Initially, patterns were fired at 40 and 25 yds., but after experiencing only one or two fluky hits from the cylinder-bored barrel out of several magazines full of shells, we moved the board in to 15 yds. where reasonable riot gun efficiency can be expected.

Though the action was a tad rough out-of-the-box, after a bit of working in, it smoothed out considerably. The trigger dropped at a crisp 7 lbs., and we were surprised to discover that, like the original, the mechanism is not fitted with a disconnector, and it is possible (but not very practical) to fire the gun by holding the trigger down and working the action. This is not recommended, and accuracy does suffer abysmally. The Interstate Arms 97 functioned flawlessly. As might be expected, recoil with the hard plastic buttplate was a tad on the stout side, but certainly not prohibitive.

Our general impression of the Interstate Arms Model 97 was very favorable. It performed well, and looked great. For those interested in obtaining an example of a Model 97 "Trench Gun" for a fraction of the price on an original Winchester, or for shooters who just want a fun short-barreled shotgun, the Interstate Model 97 is worth a look.

SHOOTING RESULTS

AVERAGE OF 10 PATTERNS AT 15 YDS.

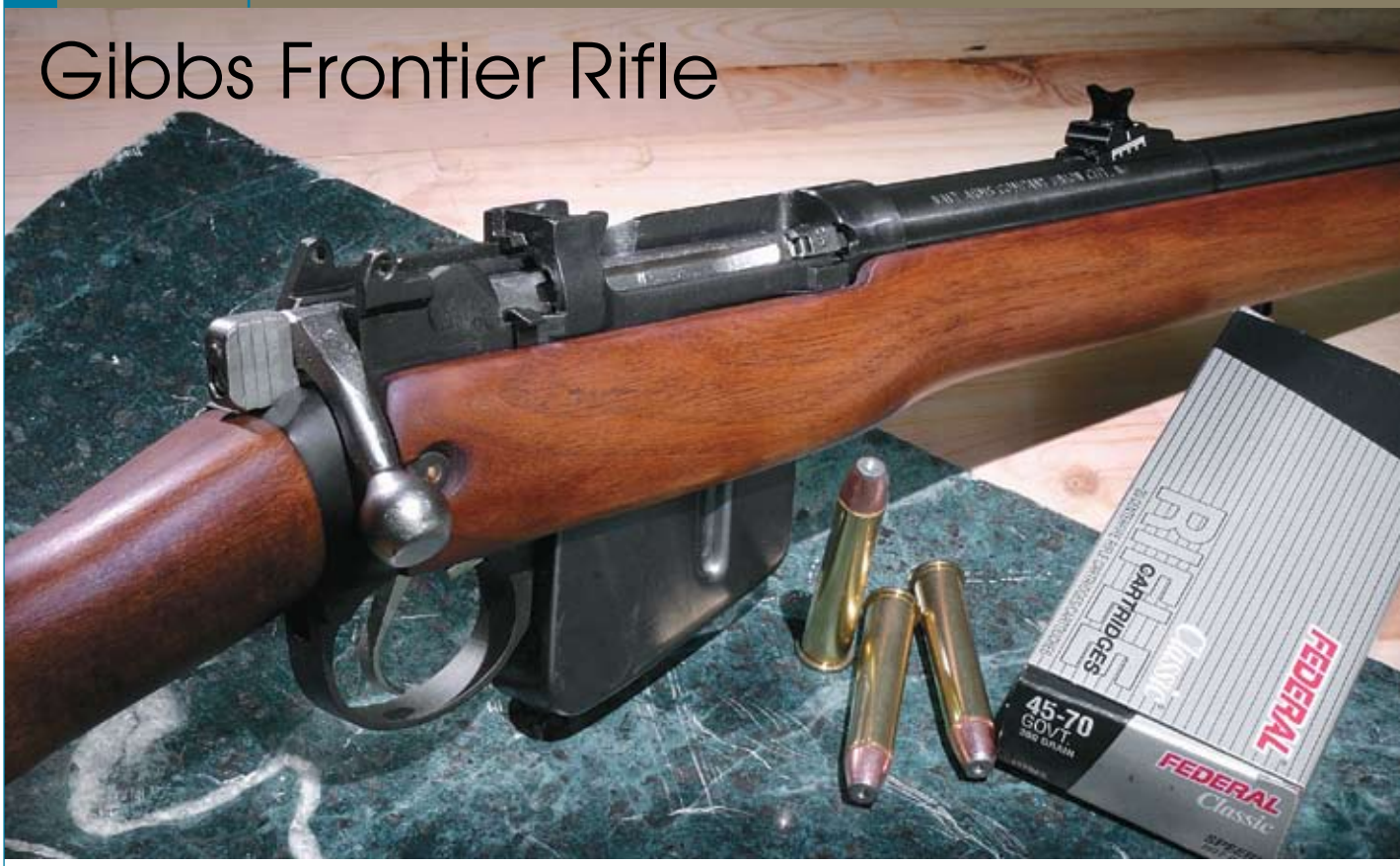


Cylinder Bore

■= Point of hold
Federal Classic Buckshot Tactical Load
12-ga., 2¾", 00 copper-plated buckshot
Average Pellet Count: 9
Measured Velocity @ 3 ft.: 1238 f.p.s.

Total Hits	9 (100%)
21" Inner Circle	8 (89%)
30" Outer Ring	1 (11%)

Gibbs Frontier Rifle



A few years ago, Gibbs Rifle Co. came up with a clever idea by starting with surplus No. 1 Mark III and No. 4 Lee-Enfields, working on them a bit and turning them into handy .303 British and .308 Win. "Jungle Carbines" and brush guns. The positive response was immediate, and the success of the project spurred the firm on to its latest effort, the .45-70 Gov't Frontier rifle.

Like some of the other earlier changelings, the Frontier is built on the No. 1, Mark III action of World War I and II fame. It's been reworked by altering the bolt head to deal with the larger .45-70 rims. The old charger bridge that was originally used with military stripper clips is still there, and though it's useless for loading the larger cartridges, it's still handy for attaching aftermarket non-gunsmithing-type scope mounts.

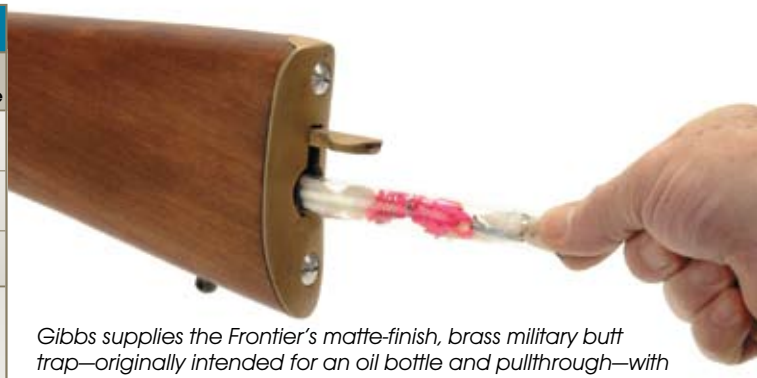
The original Enfield-style, rocking-type safety located on the left side of the receiver at the top of the butt socket is still there, and while it may not be the fastest setup to flick on and off, it is very positive and can be worked easily with the thumb of the right hand, once one gets the hang of it.

While it's tempting to think that all Gibbs did was change the bolt and barrel of a standard Enfield to handle the .45-70 Gov't, rest assured that this is not the case. Obviously, the barrel did have to be replaced, but this one is button-rifled and of an entirely different contour than the one issued on the military rifle. New iron sights consist of a Williams adjustable notch rear and ramp front

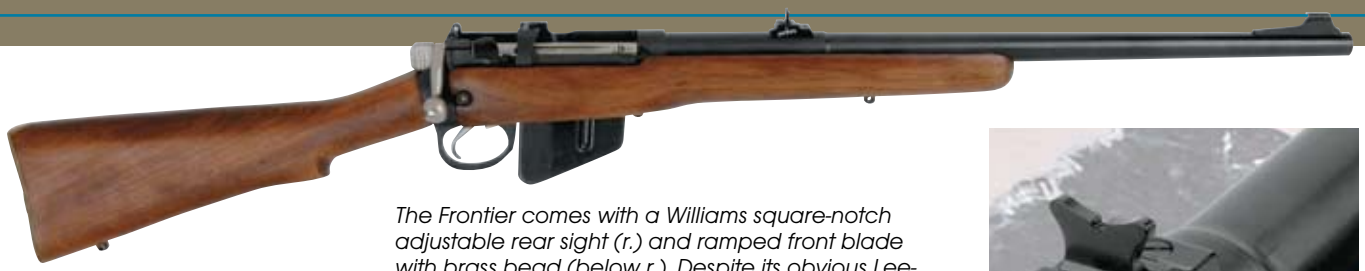
SHOOTING RESULTS

.45-70 Gov't Cartridge	Vel. @ 15' (f.p.s.)	Energy (ft.-lbs.)	Group Size In Inches Smallest	Largest	Average
Win. No. SPG4570 300-gr. Partition Gold	1816 Avg. 34 Sd	2,197	1.56	2.50	2.07
Win. No. X4570H 300-gr. JHP	1797 Avg. 35 Sd	2,151	3.52	4.25	3.88
Fed. No. 4570AS 300-gr. Speer Hot-Cor	1831 Avg. 32 Sd	2,233	4.12	5.01	4.59

Measured average velocity for 10 rounds from a 22" barrel. Range temperature 82° F. Humidity 42%. Accuracy for five consecutive, five-shot groups at 100 yds. from a sandbag. Abbreviations JHP (jacketed hollow point), Sd (standard deviation).



Gibbs supplies the Frontier's matte-finish, brass military butt trap—originally intended for an oil bottle and pullthrough—with a handy survival kit that includes a compass and fish hooks.



The Frontier comes with a Williams square-notch adjustable rear sight (r.) and ramped front blade with brass bead (below r.). Despite its obvious Lee-Enfield derivation, cartridges are loaded directly into the magazine, which has its release in the front of the trigger guard (below.)

GIBBS FRONTIER

MANUFACTURER: Gibbs Rifle Co. Inc. (Dept. AR), 219 Lawn St., Martinsburg, WV 25401; (304) 262-1651; www.gibbsrifle.com
CALIBER: .45-70 Gov't
ACTION TYPE: bolt-action, repeating center-fire rifle
FINISH: blue, chrome vanadium
MAGAZINE: detachable box, three-round capacity
OVERALL LENGTH: 41"
BARREL LENGTH: 22"
RIFLING: button rifled, six-groove, 1:20" RH twist
WEIGHT: 8½ lbs.
SIGHTS: ramped blade with brass bead front; Williams square-notch rear drift-adjustable for windage
TRIGGER: two-stage, 6 lbs. pull
STOCK: coachwood: length of pull, 13½"; drop at heel, 3¼",:drop at comb 1¾"
SUGGESTED RETAIL PRICE: $365

with a brass-beaded blade that's drift-adjustable for windage. Finish involves a polished blue barrel and magazine, matte blue receiver and chrome vanadium trigger and bolt.

The stock is a well-formed, no-frills modification of the original military handle. As noted on the socket, our evaluation rifle was manufactured at Lithgow in Australia, and the wood has the distinct look of Australian coachwood, a durable and attractive material.

Capping off the buttstock is the standard brass military buttplate, now given a matte finish, with a trap originally intended for an oil bottle and pullthrough. Gibbs offers a handy survival kit that can be dropped into this recess, and it comes standard with the Frontier. The fore-end and butt are equipped with studs for quick-detachable sling swivels.

From the outside, the removable box magazine looks just like the old .303 model, but the internals have been completely reworked to handle a trio of the big .45-70 rounds. The magazine can be removed from its well for loading, and this is recommend, as charging the magazine through the open action proved to be a bit of a chore. Spare magazines are also available from Gibbs.

We fired the Frontier for accuracy at 100 yds. using Winchester 300-gr. jacketed hollow-points, Federal Classic Pro Hunter 300-gr. Hot Cor and Winchester 300-gr. Partition Gold ammunition. Enfield actions are known for their smoothness, stemming—to a great degree—from the reliable cock-on-closing mechanism. The gun chambered rounds reliably and we had no feeding problems or failures of any kind.

The Frontier's trigger is the basic military two-stage type, and while it broke at 6 lbs., it still had to go through the customary 3/16" of travel before the sear tripped. Once you get used to this, it really isn't that much of a handicap, especially in a rifle that's designed for quick snap shooting and brush work. Recoil with the .45-70 loads was stout, due to the totally non-yielding brass buttplate.

Evaluation was accomplished using the Williams iron sights, and 100-yd. groups were agreeable enough to indicate that the Frontier would probably do quite well if topped with a quality scope.

Extraction and ejection were positive, and cases were thrown well clear of the action. We were able to get off three rounds in just as many seconds. Of course this is not particularly conducive to accuracy, but we wanted to see if the Frontier handled about the same as the old .303 Lee-Enfield—and it did. Frankly there are worse things to recommend a gun than that it shoots like an Enfield. At under $400, the Gibbs Frontier seems to be a good value and should make a top-notch knockaround brush or ranch gun.

The Frontier's original .303 British bolt head has been altered to handle the larger .45-70 Gov't cartridge case. The rifle's bolt is chrome-vanadium-plated.

Wind River Olympic 10x50 mm

Leupold and Stevens' new Wind River Wilderness Optics line is manufactured in Japan to standards set and monitored by the design engineers at Leupold's Oregon factory. Leupold's hand in the design of Wind River optics is signified by the green ring that surrounds the optic tube in the same manner as the firm's well-known gold ring.

The Wind River Olympic Series is a line of center-focus, roof-prism binoculars with three models: 8x42 mm, 10x50 mm and 12x50 mm. We recently received the 10x50 mm for test and evaluation.

The center focus knob is grooved and raised slightly above the barrels (above) on Wind River's Olympic 10x50 mm binoculars. The unit tested proved to have excellent resolution and sharp contrast even in cloudy and overcast conditions.

Roof-prism construction sets the foundation for the Olympic Series. Forward of the bridge the optical barrels flare outward to accommodate the 50 mm diameter of the objective lenses. The 10x50 mm Olympics weigh in at just 25.6 ozs., and they are just $6^{3}/_{4}$" long, $4^{1}/_{4}$" wide at the bridge and $4^{1}/_{2}$" wide at the objective bells.

The center focus knob is positioned between the two optical barrels within easy reach of the user's thumb and index finger. The fine focus ring is mounted on the right barrel just in front of the eyecup. Both the center focus knob and fine focus ring are grooved and slightly raised from the rest of the unit's body for better purchase by the viewer. This greatly simplifies precise focus adjustments even with gloved fingers. Thumb grooves on the bottom of the optical barrels further aid in the positioning of the user's hands.

Roof prism binoculars require specialized internal lens and mechanism coatings. Accordingly, Wind River's Olympic series features a phase-coated Bak4/Bk7 optimized prism system for improved brightness and clarity as well as Leupold's patented RainShed, which is, as its name implies, a rain-resistant coating. To better handle adverse weather conditions, the Olympic binoculars have been dry nitrogen filled and sealed for compete waterproof construction.

Shock absorbing rubber armor protects against nicks to the exterior finish and cushions the internal mechanism against impact. Flexible synthetic dust covers attached to the neck strap protect the objective lenses and eyepieces from dust and scratches when not in use. For protection during storage and transport, the Wind River binoculars are provided with a soft synthetic carrying case as a standard accessory. The 1" width and 1/4" thickness of the cushioned neck strap make the Wind River's $25^{1}/_{2}$-oz. weight much easier to carry on long hikes.

We had a chance to take the 10x50 Olympics afield, and they revealed an image with excellent contrast and sharp resolution despite constantly cloudy and overcast skies.

The 50 mm objective lenses of the Olympic binoculars offer a 26.4-ft. field of view at 100 yds. Leupold lists the Wind River's minimum focus distance at $10^{1}/_{2}$ ft., which matched our experience.

The center focus knob was in easy reach of the index finger and turned smoothly without any play or binding, which made for quick transitions between objects at short, medium and long ranges. The Olympic's 18 mm of eye relief combined with the twist-up eyecups provided more than enough eye relief for eyeglass wearers, but some users found it difficult to accommodate their interpupillary distance and were left with a narrow black crescent on the right side of the image even when the bridge was compressed to its fullest extent.

The Wind River Olympic 10x50 mms successfully balance weight and bulk with optical performance.

Available from: Leupold & Stevens, Inc. (Dept. AR), P.O. Box 688, Beaverton, OR 97075; (503) 526-1400; www.leupold.com. Suggested Retail Price: $450.