

GUN TESTS

THE CONSUMER RESOURCE FOR THE SERIOUS SHOOTER

June 2002

Volume XIV, Number 6



Springfield 1911
.40 S&W

.40 S&W 1911 MATCHUP: RELIABILITY IS AN ISSUE

All three of our single-stack test guns from Springfield, STI, and Armscor experienced failures to fire or function.

But are the problems fatal? We find out when we compare the \$812 Springfield 1911A1, \$430 Armscor FS, and the \$1,024 STI Trojan.

Centerfire Pistols: Page 3



Garands:
Page 9

**Civilian Marksmanship Program
International Harvester Surplus**

**Your Best Buy on a Good Garand:
CMP Gun Wins Our Four-Way Test**
This historical gun still has a lot of life.

We pit commercial guns from Springfield and Lithgow against gun-show and government rifles to find the best value.



Beretta 87

.22 LR Target Guns: We Test A Pair Of Affordable Paper Punchers

How will Beretta's new M87 perform?

That's what we were curious about when we pitted the \$669 Italian big-gun-styled rimfire against the venerable High Standard Supermatic Trophy, \$603. And we found two good buys, depending on your needs.

Rimfire Pistols: Page 18



Magazine-Fed 12 Gauge Shotguns: Saiga and Valtro Shoot It Out

The Russian Saiga failed during testing.
The Italian Valtro is slick and reliable.

**Box-Fed Shotguns:
Page 24**

Valtro PM5

Midrange .22 Long Rifle Target Pistols: Beretta Vs. High Standard

Who wins when Beretta's new \$669 Model 87 clashes with the venerable \$603 High Standard Supermatic Trophy? It depends on which games you enjoy shooting, and how fast you like to shoot.

As the sport of competitive shooting progresses, the latest trend does not always supplant or erase what came before it. In terms of smallbore pistol competition, Bullseye, one of the oldest forms of competition, is still alive and well despite the increasing popularity of rimfire practical shooting sports such as those fostered by the USPSA. But with new games comes changes in equipment.

In this test we look at two guns, one suited specifically for the stand-and-shoot game of Bullseye and a newcomer that we feel could serve speed shooters as well. Firearms International of Houston brings a lineup of pistols faithful to the High Standard design, including the \$603 High Standard Supermatic Trophy. Dating back to early days of target shooting, its design lends itself perfectly to Bullseye shooting, where accuracy and concentration come

before speed. In contrast, the Beretta Model 87, \$669, may also be a good choice for Bullseye, but its design shows elements of a more current trend.

Lately, it has become popular to avoid the cost and effort of supplying ammunition for your centerfire competition pistol by adapting a .22 Long Rifle top end to your weapon. The idea is to keep the controls and ergonomics constant while not having to buy expensive factory rounds or spend time picking up brass and handloading it. This is where the new Beretta Model 87 comes in. In many ways it is a reproduction of the Beretta 92 series pistol, except with a vastly improved trigger.

How well does each pistol perform in its specialty as well as being able to compete in other disciplines? Let's see how they shape up.

Range Session

The High Standard arrived with a

disclaimer about choice of ammunition. First, the shooter is warned that this pistol cannot be expected to run with just any type of available round. Furthermore, it should not be judged until at least 500 rounds have been fired. We concur that it is not necessary for a true target pistol to function reliably on a variety of ammunition. Ideally, one buys a target pistol for perfection. We felt that if we found just one or two cartridges that could be depended upon for optimum performance, that would be enough. After all, if winning is your main concern, then complaining about the gun malfunctioning when you load the cheapest ammo is like trying to find a way to make your race car run on regular gas.

We applied the same standard to the Beretta, but no such disclaimer was offered in the case of the 87. As it turned out, each of the guns ran best on non-jacketed solid-lead ammunition. We tried many different rounds, but lead was best as long as it was not too greasy. Our initial choice included three Remington-imported Eley cartridges; Target Rifle, Club Xtra and Match Xtra Plus. We expanded this list with two other rounds from Federal. The Gold Medal Ultra Match 1000B cartridge is the choice of the U.S. Olympic team, and for a plinking round, we picked the \$9.80-per-brick Federal Lightning. All of these employed a 40-grain solid slug. Formal accuracy data was collected from a sandbag rest at 25 yards.

Practical-shooting tests consisted of firing at multiple paper targets at 7 and 10 yards. Sweeping right to left at three targets set 7 yards away, we



Shooting .22 LR is less physically challenging due to lower recoil, plus the shooter does not have to handload or pick up brass, which takes away from training time.

shot and transferred as quickly as possible to targets 10 yards downrange. These were 3-inch bullseyes from Shoot N See to make the recognition of hits easier due to the tiny holes that .22 LR slugs produce. This test was fun. Here's what we learned about each gun individually:

High Standard Supermatic Trophy, \$603

The design roots of the High Standard rimfire pistols harkens back to before World War II. We think that is more than enough to qualify the Supermatic Trophy we acquired from Firearms International to represent the old style of rimfire target pistol shooting. But "old style" is not a bad concept when the design is proven.

Target models are invariably top of line specialized versions of the everyday plinker or basic "field" model. Tolerances are tightened, grip design becomes more specific and sights are added that are more accurate and easier to read.

Our competition target model sported a 5.5-inch barrel, and in the Firearms International line, it could be termed a budget model. Other barrels can be substituted by pressing the button at the front of the frame. A 7.25-inch fluted barrel is \$218.50.

Bullseye is a match of standing single-handed fire in long and short time frames at targets placed 25 and 50 yards downrange. The specific design needs for this game are apparent in the Supermatic Trophy. Our test sample had a bull-barrel with a fully adjustable rear sight and tall undercut patridge blade up front. Adjustment for windage and elevation was controlled by superfine clicks. This rear sight unit bridged over the slide, being attached to the frame by Allen screws and roll pins. The rear blade was quite large. A rearward cant rather than serrations cut down on glare.

The top of the barrel was drilled and tapped to accept a scope mount. The bottom of the barrel was drilled and tapped should you wish to add

ACCURACY AND CHRONOGRAPH DATA

Remington Eley Club Xtra 40-grain Solid Lead	Beretta Model 87	High Standard Supermatic Trophy
Average Velocity at 10 ft.	926 fps	920 fps
Standard Deviation	12 fps	19 fps
Muzzle Energy	76 ft.-lbs.	75 ft.-lbs.
Smallest Group at 25 yds.	0.6 in.	0.9 in.
Largest Group Size	1.0 in.	1.1 in.
Average Group Size	0.8 in.	1.0 in.

Remington Eley Target Rifle 40-grain Solid Lead	Beretta Model 87	High Standard Supermatic Trophy
Average Velocity at 10 ft.	909 fps	936 fps
Standard Deviation	18 fps	9 fps
Muzzle Energy	73 ft.-lbs.	78 ft.-lbs.
Smallest Group at 25 yds.	1.0 in.	0.7 in.
Largest Group Size	1.1 in.	1.4 in.
Average Group Size	1.1 in.	1.1 in.

Remington Eley Match Xtra Plus 40-grain Solid Lead	Beretta Model 87	High Standard Supermatic Trophy
Average Velocity at 10 ft.	952 fps	952 fps
Standard Deviation	5 fps	11 fps
Muzzle Energy	81 ft.-lbs.	81 ft.-lbs.
Smallest Group at 25 yds.	0.9 in.	0.9 in.
Largest Group Size	1.2 in.	1.0 in.
Average Group Size	1.1 in.	1.0 in.

Federal UltraMatch 1000B 40-grain Solid Lead	Beretta Model 87	High Standard Supermatic Trophy
Average Velocity at 10ft.	964 fps	941 fps
Standard Deviation	9 fps	7 fps
Muzzle Energy	83 ft.-lbs.	79 ft.-lbs.
Smallest Group at 25 yds.	0.5 in.	0.8 in.
Largest Group Size	1.0 in.	1.2 in.
Average Group Size	0.8 in.	0.9 in.

Federal Lightning 40-grain Solid Lead	Beretta Model 87	High Standard Supermatic Trophy
Average Velocity at 10 ft.	1042 fps	1048 fps
Standard Deviation	26 fps	18 fps
Muzzle Energy	97 ft.-lbs.	98 ft.-lbs.
Smallest Group at 25 yds.	0.8 in.	1.4 in.
Largest Group Size	1.3 in.	1.8 in.
Average Group Size	1.1 in.	1.5 in.



The Remington Eley Target Rifle ammo (left) shot well in both guns.



The Beretta shot the less expensive Remington Eley Match Xtra as well as it did the pricey Federal UltraMatch 1000B.

HIGH STANDARD SUPERMATIC TROPHY, \$603

● GUN TESTS RECOMMENDATION: BUY IT ●

COSMETICS

Slide Finish..... Blue
Frame Finish..... Blue

MATERIALS

Slide..... Steel
Frame..... Steel
Grip..... Wood

ADDITIONAL MEASUREMENTS

Weight (empty)..... 46 oz.
Capacity..... 10 + 1
Trigger Pull Weight DA..... NA
Trigger Pull Weight SA..... 3 lbs.
Trigger Span DA..... NA
Trigger Span SA..... 2.6 in.
Safety Span SA..... 1.2 in.
Width (max)..... 1.6 in.
Grip Thickness (max)..... 1.0 in.
Grip Circumference (max)..... 5.4 in.

OTHER INFORMATION

Warranty..... 1 year
Number of Mags..... 2
Contact..... Firearms International, Inc.
(800) 272-7816



In our view, the High Standard is a precise target gun, but it needs more looking after than the average pistol.

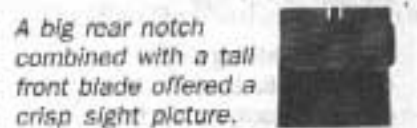


The magazine release operated by pulling the ring at the base of the front strap forward.

Our competition target model sported a 5.5-inch barrel with a recessed target crown.



The rear blade was large, and a rearward cant cut down on glare.



A big rear notch combined with a tall front blade offered a crisp sight picture.



The slide lever is on the right and the safety is on the left.



The trigger was excellent for slow- and medium-speed fire. Depressing the button (arrow) allows the barrel to be switched out.



The HS's slide is substantially smaller than the Beretta's, but that feature didn't offer any functional advantage.

additional weight to dampen recoil. However, with the big bull barrel seated so far ahead of the grip, only the most sophisticated shooters might benefit, in our view.

The grip panels were wood and were covered with a diamond checkering pattern. Favoring the right-handed shooter and one-handed fire, the left-side panel was carved for a thumb rest. Stippling on the front and back strap worked perfectly with these grips.

Controls such as the trigger, slide lock/release, safety and magazine release were accented in gold. Two magazines were supplied, and the release operated by pulling the ring at the base of the front strap forward.

If you have never handled this type of pistol before, you will have to relearn several basic operations. The slide lever is on the right and the safety is on the left. We found it nearly impossible to operate the slide lock with our trigger finger. Releasing the magazine is also a two handed operation. The safety is difficult to activate, but much easier to release with the right hand thumb. Inserting the magazine requires indexing the mag body fully to the rear of the mag well.

At the range, we had quite a time finding an inexpensive break-in cartridge. The High Standard, as warned, was quite fussy for the first 200 to 300 rounds and only a little less so after that. This pistol would only run on lead, so keeping the gun clean enough to function was a problem. The Eley Match Xtra Plus with its greasy coating proved to be the worst offender.

Federal's Lightning was about the best bet for plinking and break in. While selling for at least 70 percent less than our other test ammunitions, the Lightning also proved to be our least accurate choice. "Least accurate" in this gun meant an average of 1.5 inches at 25 yards; with other ammos it usually shot 1.0 inch or tighter. The Eley Target Rifle produced an average of 1.1-inch groups, and this ammo produced the Supermatic's best individual five-round



The HS's feed ramp and magazine need to be clean and tuned for specific ammos. The manual says the gun needs to be cleaned every 300 rounds, and the magazines need to be adjusted after the break-in period. Directions for adjusting the magazines are available on the company's web site.

performance, a 0.7-inch group.

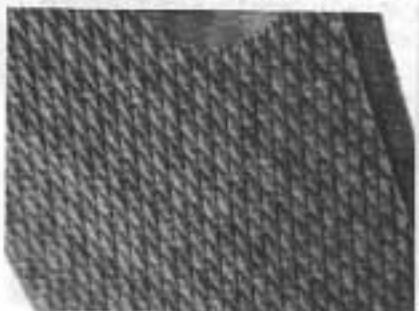
The best overall match of gun to ammunition (function and accuracy) came with the Federal Ultra-Match cartridge. Both the Beretta and the High Standard delivered the best reliability and accuracy with this round. In fact, the largest group listed for the High Standard firing the Ultra Match measured 1.2 inches, but this included a 0.6-inch group of four shots.

Probably the greatest reward of shooting this pistol was the sensational trigger: Almost zero take-up, the sensation of pressing against a solid mass without any hint of creep. The trigger releases without ever warning the shooter or interfering with follow through. This was very close to the perfect trigger for Bullseye competition as described by the late Jim Clark.

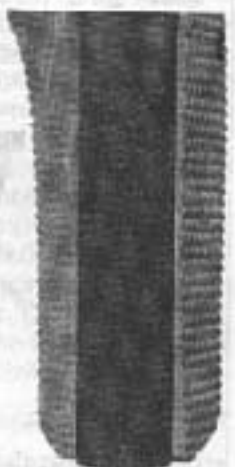
In our estimation, the one pitfall of the High Standard design is reliability. We feel the key to consistent function was keeping the gun clean, especially at the mouth of the chamber. With the slide locked back, you could



The HS thumb rest worked well for righties, but wasn't comfortable for left-handed shooters.



The grip stock had deep, well cut checkering (above), which combined with stippling on the frame (right), provided good control of the High Standard Supermatic.



see a beautiful feed ramp. But this ramp does not mate with the chamber by continuing at a gentle angle. The chamber opening is straight up and down, and we think forcing the round to make this sharp turn contributes to shearing small amounts of lead that can deposit on the facing and interfere with full lockup of the slide. Compare this feed angle with the Beretta's and it is easy to see the basis for our theory.

Another trouble spot that could be even more crucial was magazine fit.

BERETTA MODEL 87 TARGET, \$669
● GUN TESTS RECOMMENDATION: OUR PICK ●

COSMETICS

Slide Finish Black
 Frame Finish Black

MATERIALS

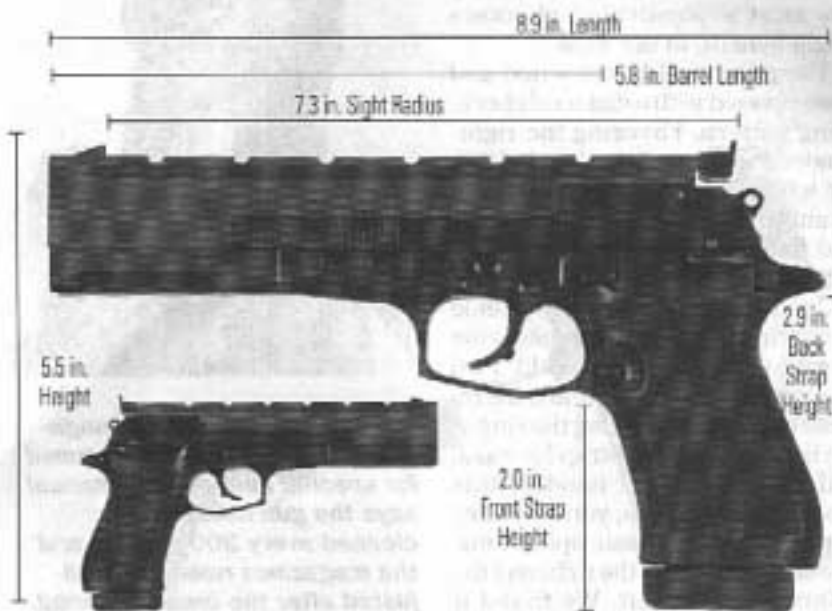
Slide Steel
 Frame Brunton (Alloy)
 Grip Plastic

ADDITIONAL MEASUREMENTS

Weight (empty) 30 oz.
 Capacity 10 + 1
 Trigger Pull Weight DA NA
 Trigger Pull Weight SA 4 lbs.
 Trigger Span DA NA
 Trigger Span SA 7.6 in.
 Safety Span SA 1.1 in.
 Width (max) 1.1 in.
 Grip Thickness (max) 1.2 in.
 Grip Circumference (max) 5.4 in.

OTHER INFORMATION

Warranty 1 year
 Number of Mags 2
 Contact Beretta USA (800) 636-3470



We would hazard a guess that for many shooters the Beretta 87 is the ideal rimfire pistol.

The magazines have full bottom-pad treatment.



The Beretta had a muzzle weight attached to the frame by lugs and two Allen screws.



The grip area strongly resembles the 92 series pistol.



The supplied sights look like Bo-Mars; they don't have to be removed to fit a scope.



Because of its big gun layout, the Beretta is ideal for practical training. The mag release (bottom arrow) and slide release (top arrow) are right where you expect them to be. It's easy to reach the Beretta's slide release without having to shift the hand too far on the grip. The Beretta sat lower in the hand, a feeling we liked.

We did notice a tendency for the magazine to move around while seated. This was an intermittent problem, but could truly cause malfunctions by changing the feed angle from shot to shot.

Beretta Model 87, \$669

We received the Model 87 just six weeks prior to the Space City Challenge, Houston's 10th annual practical shooting championship. With his "race" gun still in the shop and the match fast approaching, one of our staffers commandeered the M87 and mounted a C-More red dot scope similar to the one on his .38 Super and practiced relentlessly for the match with rimfire fodder. He credits much of his success at Space City with the extra practice time afforded by the convenience of the Beretta.

Shooting .22 LR is not tiring because it is less physically challenging due to the lack of recoil, and the shooter does not have to handload or pick up the brass, which takes away from training time.

Because of its full-size-gun layout and feel, the Beretta is ideal for practical training, and the gun has other advantages in this vein. The supplied sights are much like the popular Bo-Mar design, and they need not be removed to fit a scope. For smallbore silhouette shooters, this means the same gun can easily be used for both Hunter's Pistol (open sights) and scoped divisions.

Elsewhere, the grip area strongly resembles the 92 series pistol. Note the relieved hammer. Controls such as a magazine-release button, slide release, and ambidextrous safety are the same as on today's choice centerfire pistols. The trigger, although hinged, responded in a crisp and solid manner that closely replicates the sensation of most competition trigger actions. The feel of the trigger, which differs from that of the High Standard, starts with a brief take-up and ends with a short over-travel movement.

Between the grip frame and the sight rib was a fixed barrel fed by

blowback design. Here the 87's mimicry of a centerfire pistol ended. The profile was squared off with a muzzle weight that attached to the frame by lugs and two Allen screws. Removing the top end begins with removing this weight, but once this is achieved, the familiar system of depressing the button on the right side and turning the key lever releases the top end. At first we tried oiling this gun without taking it apart, and after some stubborn feeding of a variety of rounds, we made the decision to break the gun down and fully oil it. We also decided that lead rounds were the way to go. With these changes, the M87 broke in quickly and became a willing shooter.

Weighing substantially less than the High Standard (only 30 ounces versus 46), the Beretta recoiled more but not in proportion to the obvious weight difference. The Beretta sat lower in the hand and did a very good job of balancing static and reciprocating parts. The barrel weight was railed, so more weight could easily be clamped on, but we supposed a laser-sighting device was the more likely intent of this feature.

The High Standard and the Beretta 87 could not be more different, especially in two areas. Each pistol utilizes an external extractor, but the gauge of the extractor on the Beretta is much larger and longer. Also, the slide on the High Standard is less than half the length of the Beretta. To rack the slide of the High Standard, we preferred the pinch technique, coming in over the top with thumb and forefinger. The Beretta was best charged from underneath. The Beretta comes with an extra magazine, and the mags were fitted with full-sized basepads, adding to the sensation of handling a full-sized centerfire pistol.

In terms of raw accuracy from the bench, the M87 was very consistent, due in part to the sights being excellent and the profile of the underlug being ideal for shooting from a rest. Firing the Eley Club Xtra, the Beretta's groups were consistently below 1 inch, 0.2 inch better than the Su-

permatic's. The Target Rifle results were a tie, but the Supermatic had the smallest single group. The Match Xtra-Plus went to the High Standard by 0.1 inch, with smallest group a tie. The biggest difference was with the cheap Federal Lightning. Here the Beretta was able to land groups under 1 inch, while the High Standard suffered with this round. The best overall group was fired from the Beretta M87 using the Federal Ultra-Match, measuring 0.5 inches, and the Beretta shot 0.1 inch better with the high-end round than the Supermatic.

We didn't try any formal accuracy shooting with a scope mounted on either pistol. But we did mount a scope for speed shooting on the Beretta. This took replication of our match shooting one step closer to the real thing. The key to shooting fast is an even stroke forward and back. This means the finger travels the same distance every time.

We found this technique easier to maintain with the Beretta. This was because the slight take-up and over-travel helped us regulate finger movement forward and back. Firing the High Standard quickly required leaving the face of the trigger behind to allow the trigger to reset, and this loss of contact can add an inconsistent length of movement and also force a slight deflection in trigger press as the finger repeatedly impacts the trigger. The tendency here was to "slap" the trigger or hold it too long, not allowing it to reset.

Gun Tests Recommends

✓ **High Standard Supermatic Trophy, \$603. Buy It.** We found this gun to require more care than the Beretta, and its controls were a little clumsy compared to the other gun's. But none of this should interfere with the enjoyment of the trigger or the gun's accuracy, which is close to perfect for Bullseye competition.

✓ **Beretta Model 87, \$669. Our Pick.** This is an excellent training tool. The 87 is accurate, and it replicates the feel and operation of a centerfire pistol like no other rimfire we've shot recently. **GT**

