



A New Remington pistol for .321 Fire Bull cartridge has Bushneli Phantom scope.



fortably snuggled down in one of the hay shooting with specialized barns. Our clothing was nothing more than shandguns is the latest develthin summer chinos. One of the those sharp, early autumn cold snaps caught us flatfooted, and we were sorely disillusioned about the warming qualities of baled hay in a well ventilated barn. After a night that seemed to last forever, we were greeted by the steely-eyed dawn.

The point I want to make is that varmint hunters as a breed will go to great lengths following the sport-first, acquiring suitable arms and then doing painstaking detective work to locate game fields, all involving much time and effort, and sometimes including traveling great distances. Guns may be anything from standard production models to very elaborate custommade jobs incorporating carefully thoughtout ideas of the individual.

Long-range

opment in varmint hunting. This phase has grown tremendously during the past few years and Remington Arms Company has just announced a red-hot new gun-cartridge combination, the Model XP-100 pistol and the 221 Remington Fire Ball cartridge, a team specifically designed for long-range work. Modern varmint hunting probably began with the development of the .22 Hornet cartridge in about 1930 by a group of dedicated woodchuck hunters. It caught the attention of ammunition sachems and was first produced by Winchester in 1932. It was considered excellent for use up to about 200 yards.
At the time of the above-mentioned chilly outing, popular varmint medicine included such car- (Continued on page 111

BY PETE KUNLHOFF / Photographed by James Pickands, II

handle-locks the action closed. A rotating safety is located near the junction of the bolt and bolt handle for easy and fast thumb operation. Fired cases are automatically extracted and ejected when the bolt is opened.

The grip and stock of the new gun are made with one piece of molded Du Pont Zytel structural nylon in Mohawk Brown color. You probably know that this material is very tough and maintains its dimensional stability under practically all conditions. This means that it does not warp or change shape and assures uniform metalto-stock bedding-an important element in maintaining constant point-of-bullet impact and unvarying accuracy. The grip has fine checkering, and the stock is fancied up a bit with white-diamond inlays, contrasting black forearm tip with white spacer, and black trigger guard.

The XP-100 weighs 3% pounds, balances at the point of middle-finger rest just back of the trigger guard, and the grip fits either left or right hand like a glove. For shooters who prefer more weight toward the muzzle, five cavities are provided inside the forearm, under the barrel, for adding weights. Each cavity will hold a .38-caliber, metal-case, 130-grain bullet, nose down. Thus, up to just under 12 ounces can be added to move the point of balance forward.

Of utmost importance in accurate shooting is a good trigger pull. The pull on the new gun which I have been shooting is excellent-clean and erisp, with letoff requiring a pressure of two pounds two ounces, and with a little very soft fearward movement after the break.

For my money, a scope sight is a must for use on any of the handguns chambered for the .221 Fire Ball and .22 Jet Remington cartridges and the .256 Winchester Magnum. Scopes I have used quite a bit with such guns are the Jaeger-Nickel Supra, with 1.5 magnification, and the Bushnell Phantom, with 1.3 magnification.

The first element most of us think of in telescope sight is magnification....Other things being equal, it is evident fliat the more the target is magnified, the more accurately it will be possible to aim upon it. So, in case you have never fired a handgun with scope sight, here is the poop. Unfortunately, other things are not equal. First, any gain in magnification is at the expense of illumination and extent of field of view. Remember, magnification of the target also magnifies any wobble or move-ment of the scope-gun unit, making it almost impossible to successfully shoot a handgun with high-power scope. In addition, the necessary long-eye relief (distance from the eye to the scope) of a pistol scope, six to twenty-one inches with the Phantom and ten to twenty inches with the Supra, presents real optical problems.

The important advantage of the scope on a handgun is in the ease of sighting. With open sights, the eye has to line up three elements at different distances—the rear sight, the front sight and the target. The eye can focus only at one distance at a time, so, with the open sights, it rapidly focuses from one to the other in an effort to align them-a very difficult task for all but very young eyes. On the other hand, in a scope, an image of the target is focused exactly upon the reticle (crosshair) and the relation of the reticle and target remain fixed on one plane independent of the shooter's eye and is easy to see. With metallic sights, besides the focusing problem, the position of the eye is critical, while with the scope, it is necessary only that the eye remain within the area of the exit pupil. So, if the exit pupil is very small, nothing is gained with regard to eye position. With a large exit pupil, the position. of the shooter's eye may vary considerably without interfering with the accuracy of aim. A large exit pupil is desirable. But it can be obtained only with low magnification or a large objective lens-and the latter is impractical on a pistol scope.

Dave Bushnell had scope blocks ready when the first examples of the XP-100 were available. So I mounted a Phantom on the new pistol and got busy shooting.

· My original intention was to shoot at a distance of 100 yards, but due to lousy snow conditions, I leveled at a more convenient sixty yards. All my target shooting was done from sandbag rest.

The first five-shot group just about spoiled me. It measures under % of an inch, center to center of bullet holes far. thest apart (see the actual size reproduction on page 113). The first three shots printed in one hole, the fourth was a little high and the fifth went home into the original hole. The four shots of the group measure about 5/32 of in inch. This is good rifle accuracy! And that is just what the XP-100 gives at reasonable ranges.

My largest five-shot group at the sixty. yard mark measures % of an inch-ten-shot groups no doubt would run slightly larger, I know for a fact that the others, with a lot more shooting, have done better than I. For instance, at the Remington gallery in Ilion, New York, groups made at 100 yards have measured as little as 15-inch. And one chap, located in the West, has tightened them to as small as two inches at 200 yards. These extremely tight groups cannot be expected as a rule of thumb, but it is proven that they are possible. I would judge that my average groups, maybe smaller, are about what can be anticipated.

Being anxious to try the Fire Ball on varmint, I began to look around. My eye hit on a couple of crows on a patch of thin snow, snooping around. I spotted the black raseals from a window and sneaked out the back way with the XP-100 in one hand and a Fire Ball cartridge in the other. Shielded by some evergreen trees, I finally found a rest on one of the limbs, put the crosshair on the black spot and squeezed the trigger. The hit was almost dead center and feathers flew. Results indicated good bullet expansion. The distance was at least eighty yards.

In appearance, the Fire Ball is a shortened .222 Remington cartridge and its exterior ballistic figures are impressive. Muzzle velocity of the fifty-grain soft-point bullet is 2,650 feet per second in the 10%-inch barrel of the XP-100 pistol, with muzzle energy at 780 foot pounds. Velocity at 150 yards is 1,900 feet per second. and away out at 300 yards, the velocity still is about the same as that of the hottest .22 Long Rifle bullet at the muzzle of a rifle barrel. Mid-range trajectory for 150 yards is under two inches-so, with the sights adjusted to place the bullet on the point of aim at 150 yards, it will strike only 1.9 inches high at seventy-five yards. For the hunter who figures that most of his shots will be taken at 100 yards or under, the gun may be sighted to hit the point of aim at fifty yards. This will put the bullet only about a half-inch low (0.6 inch) at 100 yards. This means point-blank shooting up to slightly over 100 yards, and a matter of sighting three inches high on the target at 150 yards, eight inches high at 200 yards and sixteen inches high at 250 yards.

Mid-range trajectory figures in inches for the .221 Fire Ball are: 50 yards-0.2: 100 yards-0.8; 150 yards-1.9; 200 yards 20. 250 -3.9; 250 yards-6.9; 300 yards-11.3.

These figures are almost identical to those of the .22 Hornet cartridge when fired from a twenty-four inch rifle barrel. The flat trajectory curve of the bullet in flight, plus the superb accuracy given by the XP-100 pistol, furnishes a fascinating challenge for any shooter.

