

ST TESTS THE NEW OMARK MATCH RIFLE!

SHOOTING TIMES

February, 1970

60

SPECIAL

Reloading Issue:

THE 357/44

W-W BALL POWDERS

**300 WIN. IMPROVED
SHOTSHELL LOADING**

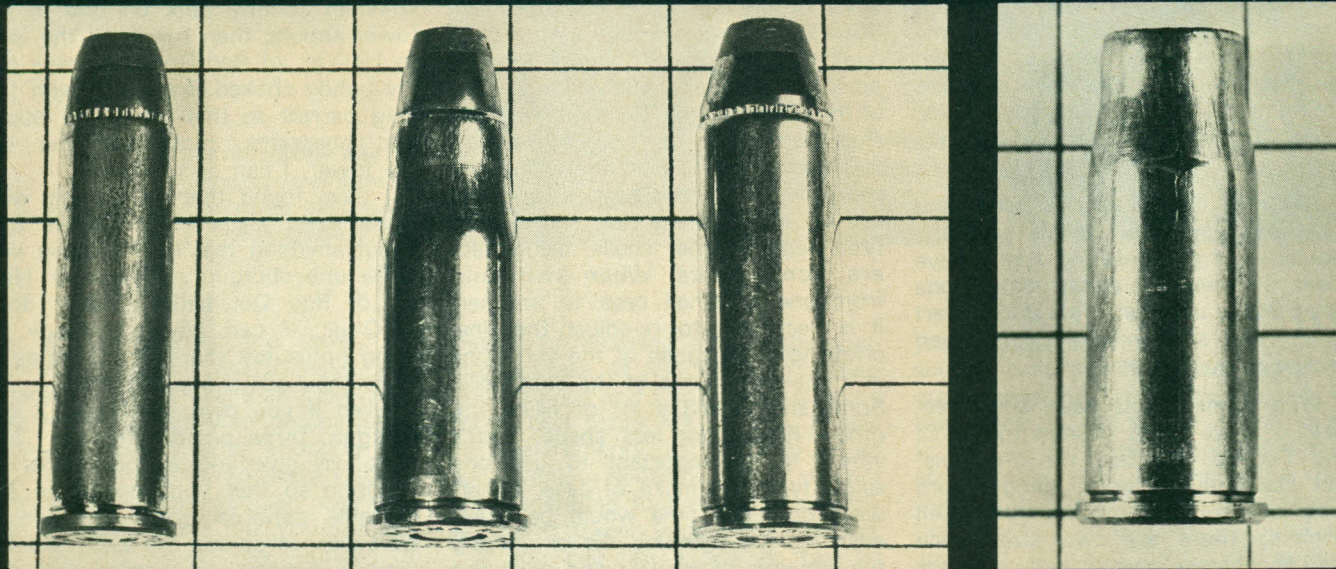


**plus: HANDLOADING
IN THE BOONIES,**

**LOADS FOR THE 10 GAUGE MAGNUM, LOADS FOR
SURPLUS PISTOLS, AND PICKING THE RIGHT QUAIL GUN**

357

Complete Ballistics Report:

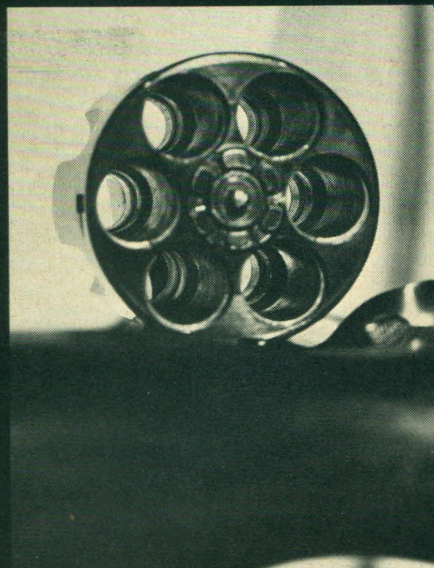


L to r: factory loaded 357 round, 357/44, and at far right, a factory loaded 44 Mag.

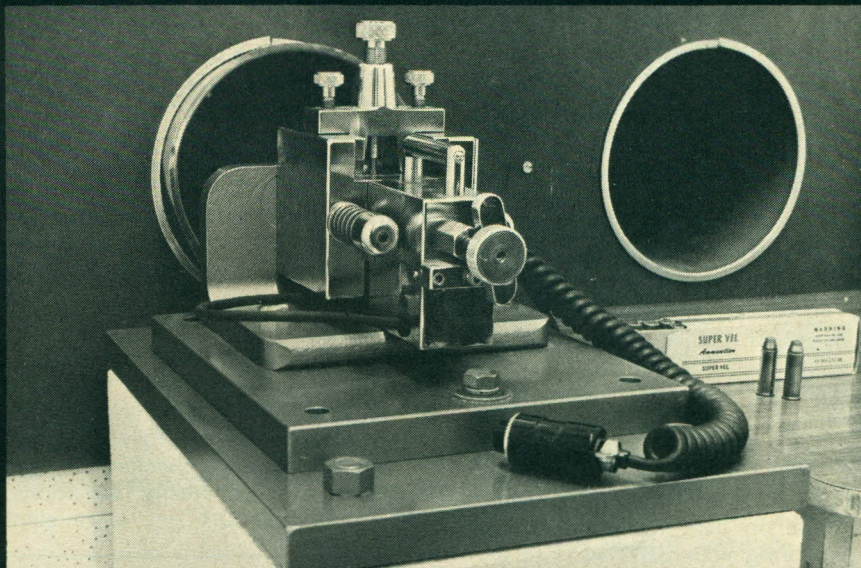
A typical case split on non-annealed once-fired 357/44.

44

Revolver Wildcat



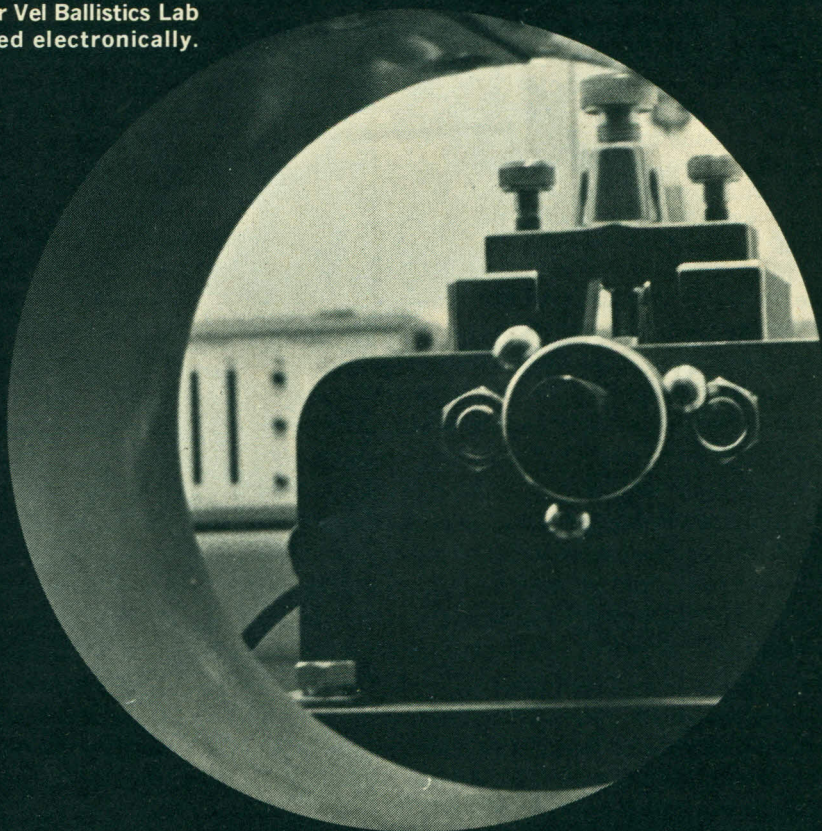
Enlarged chambers on S&W cylinder revolver show where cartridge headspaces.



A pressure gun in the Super Vel Ballistics Lab is fired electronically.

By Bob Steindler

In the fall of '66 Lee Jurras, J. D. Jones and I had made a valiant try in the Bob Marshall Wilderness to drop some big game with some of Lee's Super Vel ammo. The hunt was not much of a success (see ST April 1967), but on the way back, Lee did drop a big bobcat with one shot. Since we were all packing two or three guns, I had not paid much attention to the gun Lee used on that cat until the fairly hefty boom told me that he was using one of his pet magnums. In getting the material together for the story, I checked to see what caliber revolver Lee had used on



that cat and it turned out to be one of the first 357/44's that had made its appearance.

Essentially, the 357/44 is nothing more than the straight 44 Magnum case necked down and thereby also somewhat bottlenecked to 357 caliber. Ballistically, the wildcatted 44 Magnum equals and even somewhat exceeds the advertised factory ballistics of the 357 Magnum, except that there is more noise and kick — and of course some of the velocities as well as the pressures are quite a bit hotter and higher than those of the venerable 357.

At that time, several other gun writers had played around with the 357/44, but, for some reason or another, none of the data agreed with the other guy's finding, nor did the velocity or performance claims.

Lee had worked up a couple of loads, had run velocity and pressure tests with his S&W Highway Patrolman, but had never made up a pressure barrel for that caliber. At that time he was using strain gages in the Super Vel ballistics lab, and eventually, during the spring of '67, he called me. "Come on over for a couple of days and bring your 357/44. I finally got a pressure barrel and we'll go out and do some chuck shooting."

I had had Bain & Davis (599 W. Las Tunas, San Gabriel, CA 41776) ream out the chambers of my Highway Patrolman to that wildcat caliber and was anxious to see just how much difference there would be between Lee's gun and mine, and also how the wildcat would stack up in the lab against the factory ballistics of the 357 Magnum as well as the claims made for it by the various writers who had worked with the cartridge.

Although there is not much involved in converting 44 Magnum brass to 357/44, there is, in some lots of brass, a considerable rate of case attrition which runs from 5 per cent to as high as 50 per cent. Careful, and I mean careful, annealing cuts case loss down to less than one per cent, but get too happy with that blowtorch and you'll have cases split after the first shot, even with mild loads.

Unique and 2400 are suitable only for the heavier bullets, while AL-8, which incidentally is a good powder for the standard 357 Magnum, does well, but its performance is topped by that of Hodgdon's H-110. If this

powder is used, it becomes essential to give case mouths a good, heavy crimp.

After trying various primers, Lee and I settled for CCI 350 primers, and over-all length of the loaded cartridge with the Super Vel 125 gr. HP bullet should not exceed 1.695". As is customary, we started with low loads and worked up. At that time, the Super Vel lab used an Avtron 133A Chronograph and the strain gage system for pressure determinations, and thus we were able to record five shots, pressure and velocity, on a cathode-ray oscilloscope, storing the five readings for immediate comparison. Pressures were taken from a 6" Douglas tube, 1:10 twist, .356" groove diameter, and chambered with a Clymer reamer in the Super Vel machine shop where all of Lee's pressure barrels are made.

In working up loads, we used Norma as well as Remington brass, carefully noting production lot numbers of the virgin brass. For the record, all charges were carefully weighed by one of us and checked by the other guy; charge weight deviations, even as little as 0.1 gr., were elim-

inated. Nevertheless, some cases split on the first firing, and similarly some cases had to be driven out of the chambers while others slipped out freely. Since primers also came from the same production lot, as did the powders and bullets, it must be assumed that slight brass variations were responsible for split necks as well as for ease or difficulty of extraction.

In rechambering a 357 Magnum revolver to 357/44, the chamber walls must be thick enough to permit the removal of a fair amount of steel. The pressure level should probably be kept around 32,000 psi since the necked cases would probably give extraction trouble at higher pressure levels in some revolvers. The loads listed below have been fired not only in the Super Vel pressure barrel, but also in Lee's and my S&W revolvers. Nevertheless, I found that some of the loads that can be handled easily in Lee's gun gave hard extraction and a high percentage of split cases in my revolver, despite the fact that the rounds were assembled at the same time from the same production lots of brass, primers, powders, and bullets.

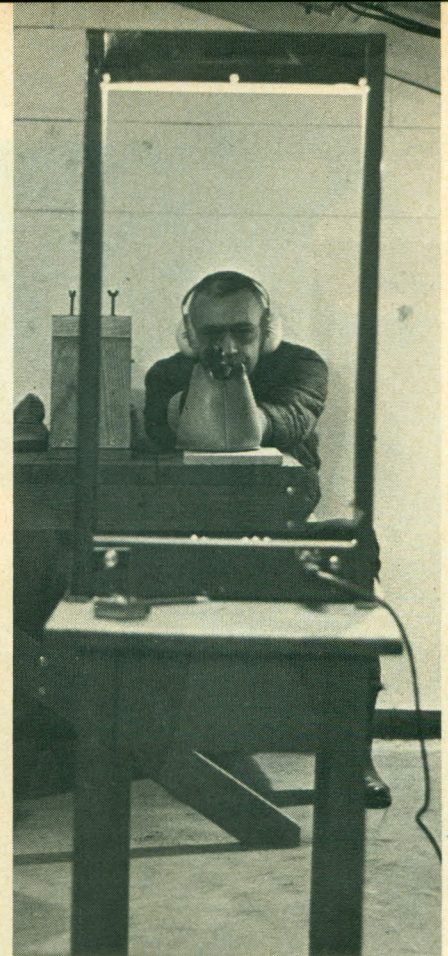
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357/44 Load Data

Bullet	Primer	Powder	Charge	fps	psi	Remarks
Super Vel 108 gr. .355"	CCI350	H-110	24.5	1561		good hunting load
	CCI350	H-110	26.5	1896	26,900	maximum load!
	CCI350	AL-8	22.0	1891		*
Super Vel 110 gr. JHP .3565"	CCI350	Unique	14.0	1830	37,700	
	CCI350	Unique	13.0	1680	26,000	
	CCI350	H-110	25.0	1820	24,900	
	CCI350	H-110	26.0	1930	30,600	
	CCI350	AL-8	21.0	1880	—	*
	CCI350	2400	21.4	1670	25,800	
Super Vel 125 gr. JHP .3565"	CCI350	AL-8	20.0	1750	—	*
	CCI350	H-110	24.5	1561	27,850	
	CCI350	H-110	25.0	1860	35,400	
	CCI350	2400	21.0	1600	28,500	
	CCI350	2400	22.0	1730	34,000	
Speer 146 gr. HP	CCI350	2400	20.0	1650	38,700	
Speer 160 gr. JSP	CCI350	2400	20.0	1625	—	*
	CCI350	H-110	18.0	1290	15,000	

*Chronographed on my indoor range with Avtron T333A chronograph and Avtron photoelectric screens, 10 ft. spacing.



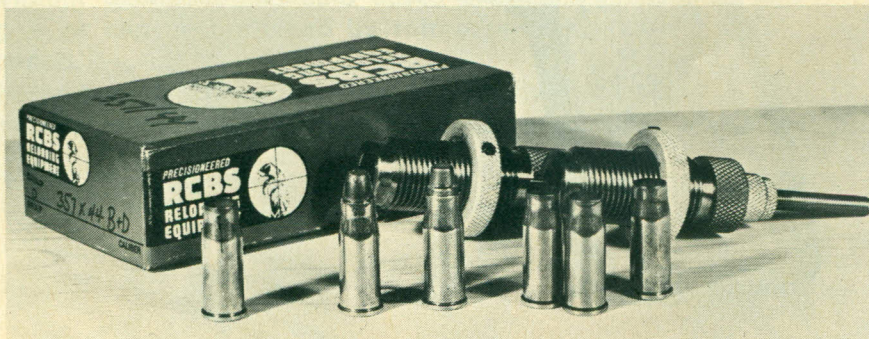
The Avtron chronograph with photoelectric screens was used to verify the velocities.



S&W Highway Patrolman is one of the few guns that can be successfully chambered for this wildcat.

Lee Jurras bends over bobcat that fell from one bullet from 357/44.


Cases for the handgun wildcat are easily formed with the RCBS dies.

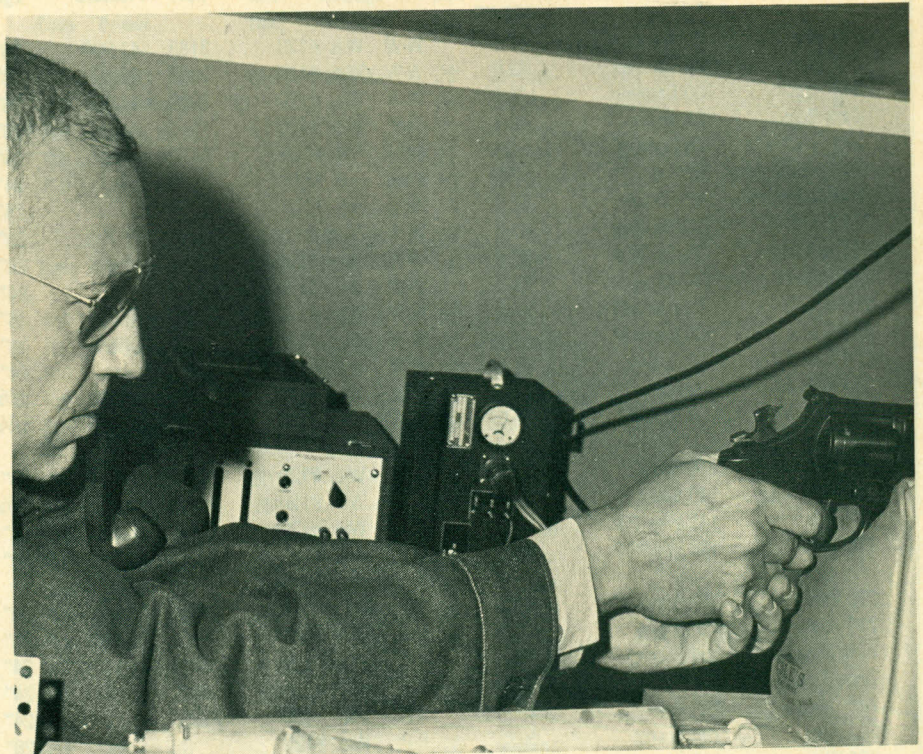


357/44

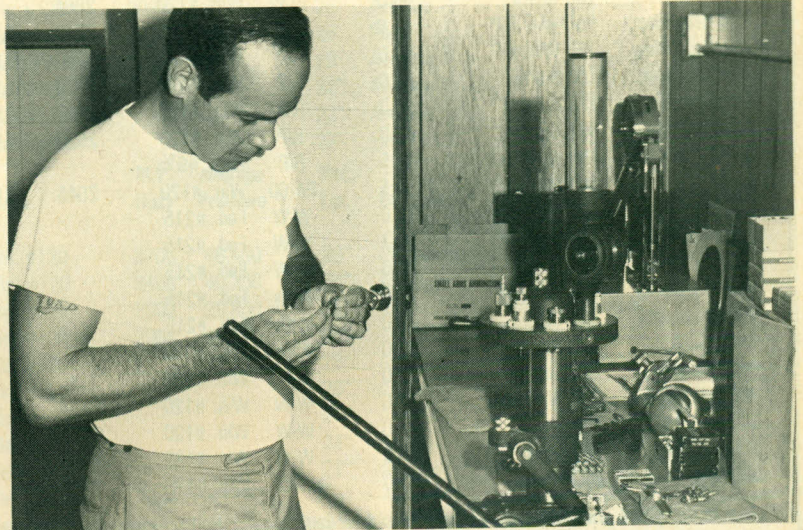
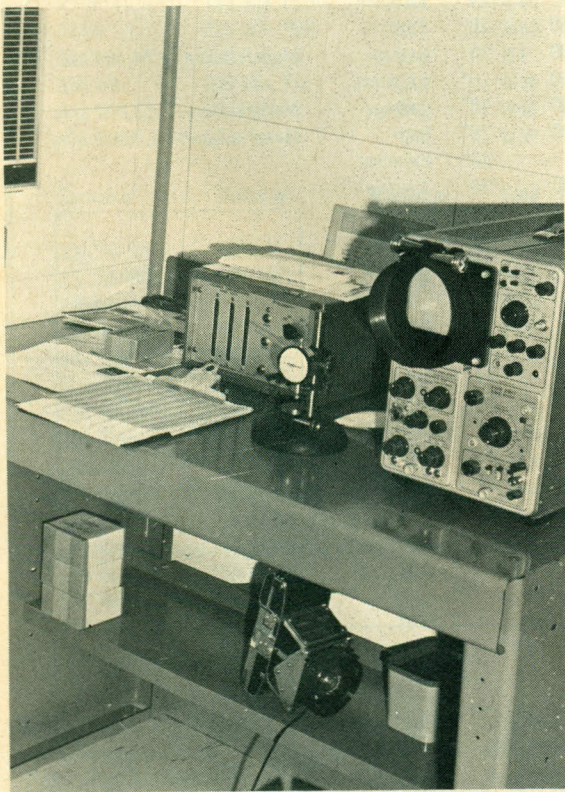
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The effect of the light Super Vel bullets on varmints from the 357/44 are dramatic and devastating. They should perform well on medium game, although I don't believe that they are quite heavy enough for game the size of moose or elk. Recoil of the 357/44 is perhaps just a hair more severe than the recoil you'll feel from the heftier loads in the 357 Magnum. In contrast to the 41 and the 44 Magnum, the 357/44 wildcat is pleasant to shoot and since recoil is not nearly as severe, recovery of the sight picture is considerably faster.

After working with that caliber for nearly two years, I must say that I prefer it over the 41 and the 44 because gun weight is less and therefore toting the gun around on a hunt is not nearly as tiring, but there is the definite drawback of split cases and the extra job of careful annealing — and the less you ply the torch, the better off you are in this instance. 



Many hundreds of rounds were loaded and fired to determine best loads for the 357/44.



Lee Jurras checks loads in Super Vel Laboratory.

Cathode Ray oscilloscope is shown at right.

The closed circuit T.V. allows instant evaluation of the accuracy potential.

