

Questions and Answers

From the tens of thousands of questions and letters on guns, ammunition and their use that the *American Rifleman* receives every year, it publishes here the most interesting. Receiving answers to technical questions is a privilege reserved to NRA Members. Questions must be in the form of letters addressed to Dope Bag, c/o NRA, 1600 Rhode Island Ave., N.W., Washington, D.C. 20036; must contain the member's "code line" from an *American Rifleman* or *American Hunter* mailing label or membership card; must be accompanied by a stamped, self-addressed, legal-size envelope and must be limited to one specific question per letter. Non-members may submit a question with membership application and dues. We regret that no technical question can be answered by telephone and that we cannot place even an approximate dollar value on firearms of any description.

Spanish .308 Mausers

Recently, quantities of Spanish Model 1916 rifles, actually modifications of the old 1893 Mausers, have come on the surplus market. Some are sold in their original 7x57 mm cal., but others have been converted to .308 Win. cal. Are these conversions safe to fire?

Answer: The Model 1893 Mauser is adequately strong by design to use modern .308 Win. or 7.62 mm NATO ammunition safely, assuming that the physical properties of the steels used in the bolt and receiver are comparable to those of steels used in more modern center-fire rifles. What is *not* known is whether that assumption is warranted. The processes of heat treatment for rifle bolts and actions before World War I were not always very carefully controlled, as they have almost invariably been since the 1920s. Some of the old rifles were very good, but others were not. The existence of the infamous "low-number" U.S. Model 1903 Springfields made before about 1918 attests to that fact.

The Model 93 Spanish Mauser was manufactured for use with the contemporary 7x57 mm Mauser military cartridge, for which the normal maximum pressure was about 43,000 to 45,000 p.s.i. (copper), and the rifles were undoubtedly proof-tested with a load that provided a safe margin above that pressure.

The .308 Win./7.62 mm NATO cartridges, however, develop normal maximum pressures on the order of 50,000 to 52,000 p.s.i. (copper), and the original Model 1893 Mauser proof-testing would *not* have been comfortably above that pressure level. There is therefore not much assurance that any particular Model 93 Mauser is entirely safe for use with modern .308 Win./7.62 mm NATO ammunition, notwithstanding that many of them have been converted to cartridges that develop more pressure than the original 7x57 mm military ammunition, with no notable record of failures.

Ludwig Olson, in *Mausers Bolt Rifles*, reports that some Spanish Model 93s were converted to the 8x57 mm cartridge, that in Europe is loaded to about the same pressures as the .308 Win./7.62 mm NATO, and apparently this conversion was considered safe and found acceptable in Europe. Those particular guns would, however, undoubtedly have been reproofed after the conversions, as is required by military regulations and national proof laws in all industrialized European countries. Whether any or all of the Mauser Model 93 rifles being imported nowadays with .308 Win./7.62 mm NATO barrel have been similarly reproofed is not known.

One possibility is that the rifles converted in Spain were intended for use with the Spanish 7.62x51 mm CETME cartridge, which has the same exterior dimensions as the 7.62 mm NATO, but is loaded with a lighter bullet, at a lower muzzle velocity. This CETME cartridge fires a bullet of about 112 grs. at a muzzle velocity of about 2500 f.p.s., and the chamber pressure is probably even less than that of the old 7x57 mm Mauser cartridge for which the Model 93 was originally intended.

This rather unusual 7.62 mm load was developed in Spain for use in the CETME military rifle, from which the much-improved German G3 7.62 mm NATO rifle eventually evolved, and it would indeed be quite logical for Spain to convert the Model 93 for use with this 7.62 mm reduced load.

Whatever the facts, on the basis of information now known to us, the firing of .308 Win. or 7.62 mm NATO *full-charge* loads in converted Model 93 Mausers can't be recommended.—W.C.D., Jr.

9 mm Ultra Cartridge

At a recent gun show, I saw a Walther PP Super autoloading pistol in 9 mm Ultra or 9x18 mm cal. It was imported as German police surplus by Interarms.

Does this firearm use the same cartridge as the Russian Makarov and Stechkin pistols? What is the availability of ammunition and the possibility of reloading these rounds?

Answer: The 9 mm Ultra round (or 9 mm Police as it is also known) is not interchangeable with that of the Russian 9 mm Makarov, although they share the designation 9x18 mm. While both case lengths are nominally 18 mm (actually, 17.8 mm or .701"), the Russian bullet is 9.25 mm in diameter versus 9.0 mm for the Ultra.

The original Ultra development was begun in 1936 by the German Air Force. A cartridge with a truncated-cone bullet similar to the modern version, but with a case length of 18.5 mm, was tested in specially chambered Walther PP pistols; however, this project was abandoned before World War II began.

The West Germans developed the new Ultra cartridge as a unique law-enforcement round more powerful than the 9x17 mm (.380 ACP), but fireable in blowback-operated pistols (see *American Rifleman*, Sept., 1984, p. 50). This development was eclipsed when the government mandated 9 mm Parabellum as the standard cartridge for all West German police, and the Walther P5, SIG-Sauer P6, or HK P7 as acceptable standard handguns.

The European firms of Hirtenberger (Austria) and Dynamit Nobel (West Germany) still manufacture Berdan-primed 9 mm Ultra/Police ammunition, but reloading them is a chore. A better alternative would be to trim Boxer-primed 9 mm Parabellum (9x19) cases to length and use standard .380 ACP loading data.—J.P.C.

Where Can I Get?

Primer-powered, reusable rubber bullets for indoor handgun practice

Supreme Products Co., 1830 S. Calif. Ave., Monrovia, Calif. 91016

Brass trigger guard/backstraps for Ruger single-action revolvers

John B. Williams, 1501 E. Chapman Ave., Suite 306, Fullerton, Calif. 92631

No-tool powder adjustment knobs for Dillon powder measures

Oliver's, 716 N. Hughes, Little Rock, Ark. 72205

M16/AR-15 90-rd. off-set drum magazine
MWG Co., 18689 S.W. 103 Court, Miami, Fla. 33157