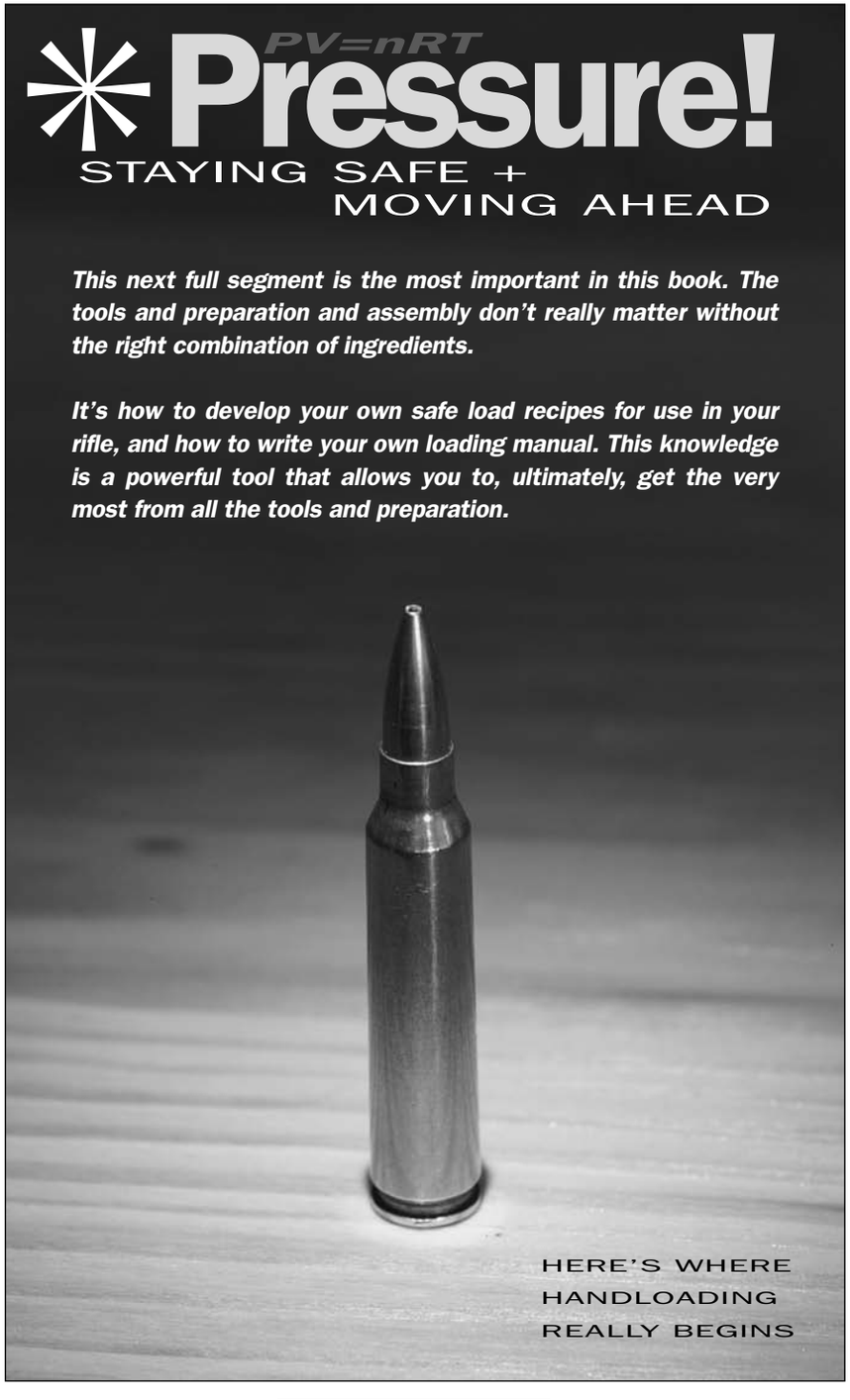

This word exists in this book probably 1000 times, and it's referred to in virtually any materials anyone will encounter on the topic of reloading. Right. It's pretty obvious in its meaning, but, as I'm prone to do, of course, there's more.

"Chamber pressure" is how much force the cartridge case pushes, expands, against the chamber with. Since the volume inside the case is relatively small, it's at the chamber where the most pressure exists. Not all the propellant is consumed prior to releasing the bullet, and therefore releasing the pressure, but what amounts to an explosion while the case is still capped is the source for pressure, the amount of pressure.

SAAMI (Sporting Arms and Manufacturers Institute) publishes pressure standards, which are maximums, for different cartridges.

There are different means or methods to get pressure readings. The most accurate is the Piezo. Like the "Copper Crusher Method" that preceded it, readings are gotten from a modified action. To obtain Piezo data there's a hole drilled into this rifle chamber and within that cavity is a quartz crystal transducer, and that's attached to high-zoot measuring equipment. The copper method used a copper slug in the hole that was measured and compared to its original state, after firing (it's also been done using lead). This is why sometimes pressure is expressed as CUP, which is "copper units of pressure" instead of PSI, which is "pounds(-force, technically) per square inch," which, via the Piezo method, is now the standard. CUP or PSI cannot be equivalently converted, by the way, and, by and large the CUP number is smaller. Like 52,000 CUP for .223 Rem. and 55,000 PSI. And there are CIP and SAAMI pressure figures, and CIP is European (and also NATO). There are also affordable setups with strain gauges that measure expansion on the outside of the barrel , but they're not accurate.

However! None of that (really) matters a whit to any of us. **"Pressure" is demonstrated by outcomes**, not numbers, for us.

Published pressure maximums also have to do with the firearm, not only the cartridge. Over years, steel has radically improved: it's stronger with better flex characteristics. Modern, more recent, cartridges nearly always have much higher PSI maximums than cartridges conceived way on back. This has a lot to do with that. One of the best examples are the newer "short" and "super