

**Long Range Shooting Tips,  
Cartridge and Bullet Selection for Precision Rifle Competition.**

**By Jim See**

Over the past 5 years we have seen exponential growth in the Practical Rifle match segment. Along with this growth have come many new products and equipment improvements. But the biggest question new shooters have is; What Bullet and Cartridge should I choose?



Well there is no doubt, there is a wide selection of cartridges to choose from, and once the bore size is selected an equally wide selection of bullets. So before we get into the top contenders, let's start by defining what makes a good match cartridge based on performance standards.

**Low Recoil-** for self-spotting impacts, making wind or elevation correction easier.

**Sufficient impact energy-** to aid in seeing those impacts.

**The ability to use high BC (ballistic coefficient) bullets at medium to high velocities-** to create a ballistic advantage in shooting through windy conditions at long range.

**Inherent accuracy-** having a cartridge with a wide accuracy node which is easy to maintain.

Based on these standards, we can see why the 6mm and the 6.5mm bores are so popular, many of them match these performance criteria to a T.

## The solid choices.

It seems every year there are new contenders to the “preferred cartridge” line up. Let’s first talk about the old stand byes that have proven themselves over the past 4 plus years and stood the test of time, while meeting our outlined performance criteria.

**The 6.5x47 Lapua** has earned the spot it holds as a super consistent performer with exceptional accuracy and barrel life. Easy to tune and develop loads for, the 6.5x47 is like hitting the easy button. You cannot go wrong with this selection. It’s not new and flashy but it has consistently put hardware on the wall of many top shooters.

**The 6.5 Creedmoor** has been a favorite among those who choose to shoot factory ammunition. Like the 6.5x47 excellent accuracy and consistency can be achieved with the Creedmoor, both cartridges are similar in ballistic performance so much so that they are almost indistinguishable.

**The 6mm Dasher** long popular in the bench-rest world has become increasingly popular over the last 3-4 years as a practical precision offering. The upside is the low recoil and easy tuning this cartridge provides, the biggest drawback to some shooters is the brass prep and fire forming process.

**The 6XC** designed by David Tubbs as an improved variant of the 22-250 case has long been used in Precision rifle matches and currently enjoys moderate use today. It is a solid performer capable of excellent accuracy and easy load development.

**The 6mm Creedmoor** came on the scene by storm a few years ago and became an intriguing new performer for many shooters. Today it has faded some to the 6mm dasher, as shooters seek longer barrel life than the 6mm Creedmoor could offer. If you are one who feels the need for speed the 6mm Creedmoor is still a capable round that meets our performance criteria.

**The 308 Winchester** is an old war horse that is still capable of amazing things in the right hands. The 308 could be called the “king of consistency” because it will give you ultra-long service life and stellar accuracy over that time. What it lacks in mild recoil it makes up for in consistency. Even so it deserves a spot on this list.

Of these 6 cartridges I am still a big fan of the 6.5x47 Lapua. It has won multiple 2 day matches and numerous one day matches, in my hands. I enjoy the ease of load development and the long term consistency of those loads over the life of a barrel. With high BC 140 class bullets there is not much more you could ask for other than perhaps a bit more speed than the typical 2750-2780 fps where the 47 likes to run.

The honest answer is; any of the above will perform well and have been proven performers. Your selection of one may vary from other individuals based on different parameters that you find important. So research the pros and cons of each and make an educated choice for your needs.



### **The new kids on the block.**

Recently some new players have shown up, driven by new advancements or a small window between what is currently offered. These cartridges have yet to prove the test of time but are being used and vetted by some shooters.

**The 25x47 Lapua and 25 Creedmoor** have come about due to bullet advancements by Black Jack Bullets. The advent of the 131 grain Ace has put the high BC capability into the quarter bore. On paper this is an exciting advancement, in reality it is the offering of only one or two capable bullets from a single manufacturer. Will it stand the test of time? We will see.

**The 6mm GT** is a collaborative effort between George Gardner and Tom Jacobs. The idea is to make a super-efficient cartridge that competes with the 6mm Dasher at lower pressure, thus increasing barrel life, while at the same time feeding through unmodified magazines. I think this new offering has legs and will become a fixture in the sport. Again it too currently suffers from a limited number of available component manufacturers, specifically the brass.

### **Picking the projectile.**

Let's not make this too difficult; Pick a high BC bullet, and see if your rifle likes it.

In the 6mm's this will be a bullet from 105-115 grains in weight, with high BC numbers that will satisfy all but a few particular shooters. Offerings from the big bullet manufacturers are numerous, if your particular rifle does not like one particular bullet, simply move on and try another. Most match bullets will perform well at long range with an accurate forgiving node.

In the 6.5mm bore, bullets from 140-147 grains are very popular. I have run the 140 class bullets from Berger, Hornady and Barnes over the years and have had great results with them all. The key is to find the bullet your rifle likes and which shoots consistently over time.

The choices are actually much more diverse than what I can cover in this article, but understand this list probably makes up 90% of rifle cartridges used in most practical precision rifle matches today. About everything under the sun has been tried over the years, some with great success, and others with dismal results. It's nice to be different but it's easy to stick with proven winners.

*Bio; Jim See has been shooting competitively and building custom rifles since 2008, he owns Elite Accuracy LLC and continues to shoot precision rifle matches, instructs in competition training classes and build custom rifles.*