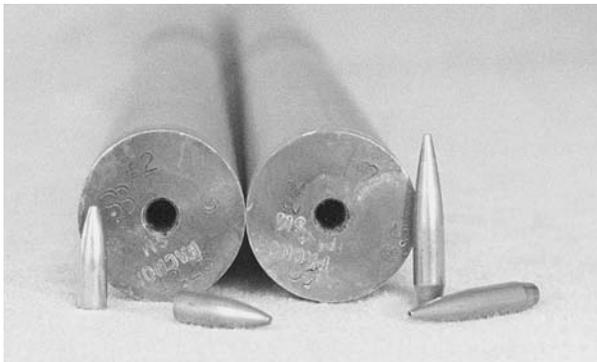


The advice I give, and take, is to choose a barrel twist rate that's a little faster than what the "industry" might well say you need. I've talked this topic to death in a few other books, and here again later on, but my recommendation for

.223 Rem., for instance, is 1-8 or 1-7. Those will stabilize the longest bullet most will realistically use. The reason I give this advice is because many may want to explore "bigger" bullets, especially in the smaller calibers. Mo BC!



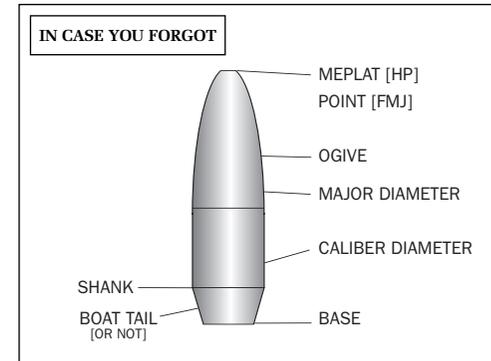
I realize there's a lot getting thrown on the page here, and we'll get to some general guidelines to apply, which is what matters.

The shank, or body, of the bullet is the section along its length that has parallel dimension, which will be the caliber size. The length of this segment has the greatest influence on bearing area, but bearing area also includes the portion of the bullet that is the same diameter of the rifling in the barrel. The smaller (shorter) the bearing area is, the less pressure and the greater speed. Also, though, bullets with greater bearing areas tend to shoot better because they

#### □ Twisted Sister

Here's a good shot of what we're talking about hereabouts. Left is a Sierra 69gr MatchKing, a tangent 8-caliber (approximately) ogive. Right is a JLK 70gr VLD with a 15-caliber secant ogive. Same weight (approximately) but worlds different in design, and also in flight. The VLD will kill the Sierra, bury it, dig it up, kill it again, and bury it again. But! The Sierra is forgiving in its ease of deploy, and the VLD can be stubborn. The MatchKing is tolerant of jump; the VLD is not, and, despite my many efforts to prove otherwise, cannot be fired with reliable success loaded to fit an AR15 box magazine.

have demonstrably greater tolerance. That means they are not as sensitive to the very many variables that exist with loads and barrels. They are stabilized more easily through the bore, so they shoot better easier.



As the body of the bullet moves forward toward the tip, the shape tapers. This area is called an "ogive." I like to call it the nosecone. Also, there are two designs that are silhouettes, essentially, that shape the transition from caliber diameter to bullet tip: secant and tangent. Secant is a sharper "step" in the shape; tangent is a more rounded and gradual arc. Secant flies better; tangent shoots easier. I'm leaving out a whole lot of discourse here, but I'll explain.

The arc can be expressed in how many calibers, or multiples of the bullet diameter; it's a circle however many times the bullet diameter. The more calibers, the flatter the arc (the bigger the circle). A lower-caliber arc makes for a more blunted, ball-like shape.

#### □ Bearing Area

If you take and drop a bullet point down into the muzzle, all showing above surface is, pretty much, bearing area (aside from the boat-tail). Bearing area isn't just caliber diameter because the barrel lands (rifling) are smaller diameter than the bore. Bullets with a shorter bearing area can go faster at the same firing pressures, but those with a longer bearing area tend to shoot well, more accurately, more reliably. Too little bearing area and the bullet may not fully stabilize inside the barrel. I think it's really bearing area compared to ogive that makes the difference. A long bullet can have a long bearing area, compared to the bearing area on a short bullet. But. It's the proportion of bearing area to overall length that matters. I'm not certain there is a formula, or if there is it probably doesn't work often enough, but it is decidedly a relationship founded in experience ("longer" and "shorter," referring to similar-form bullets).