## From Chapter 15. Tormenting Ted:

## Explaining to Ted What Makes a Curveball Curve

It's quite a leap from teaching Seri Indians the knuckleball to knocking myself out trying to impress Ted Williams. When I showed up for spring training in '69, there was the Splendid Splinter in person, a baseball icon oozing venerability. Over the winter, he had signed on to become the Senators' new manager. Boy, did that get us noticed! And a lot of respect, too. The sports journalistic world was giddy with anticipation of the '69 season.

Assorted media were slinking around all over the place in spring training at Pompano Beach, FL, that year. For the players, this was exciting and amusing – much better pestered by the press than ignored like cheap cannon fodder, the role the Senators had played for many decades. Implicit in the attention we were getting was the cool assumption the Senators were going to play like a team befitting their humdinger manager. Great expectations. And ridiculous, too. How many teams could play up to those lofty standards?

It didn't take my cranial demon long to get me into trouble in this new electric environment. We were about three or four days into spring training when Ted held a meeting with his pitchers. Mainly, his objective was to let us know what he expected of us. Which wasn't much, apparently.

"Pitchers are the dumbest guys in baseball," Ted began. This was one of his favorite themes. He mentioned it every day. "You're so dumb, you don't even know when a hitter has taken a good cut at one of your *bleeping* pitches. Some guy really digs in on you and rips and, POW, pulls a shot into the seats foul, and you think it's just another *bleeping* strike." Then Ted tested us, "I'll show you how dumb pitchers are." He drew himself up to well over his full height (6' 3") to make his point. "I'll bet not a single one of you even knows what makes a curveball curve."

How was I to know this was a rhetorical bet? It sounded to me like a stark raving challenge, just swaggering out there, taunting me to answer it. So, I answered it. I described what is called the "Magnus<sup>1</sup> force" on the spinning ball. This is a force that nudges the ball in the same direction as the spin on the pitch's face. I offered a simplistic model involving vacuum and drag resistance, but it happened to be exactly the explanation Ted was almost bursting to blast us with.

In my annoying pedantic way, I picked up a ball to point out the forces acting on it during its trajectory. I made it through the whole demonstration before I realized that something was wrong. My ill-advised outburst had left nothing for Ted.

<sup>&</sup>lt;sup>1</sup> Named for Gustav Magnus, German physicist and chemist who studied forces acting on spinning spheres, such as cannonballs, in the mid-1850s.

During the crushing silence that followed, I saw my baseball life flash before my eyes. I had time to consider my career options.

Every pitcher on our staff knew what made a curveball curve, of course - at least, the simple version I described. We learned this in pitcher kindergarten. And the whole staff, except me, knew when to keep their mouths shut. As for Ted, he learned this Magnus stuff as he was training to become a pilot in World War II. He got it again in a refresher course in the Korean War. Ted decided to overlook my faux pas, thank goodness. "Well, at least one of you knows," he grumbled. He didn't seem pleased to find that out, however.