W.H. Mason, October 22, 2016

Curiosity Number 17. Dimples on Golf Balls.

This is a simple one. We all know that golf balls have dimples to reduce drag. Students often measure pressure distributions for a circular cylinder or a sphere with and without transition strips. That shows them how the drag drops when separation is delayed.

A number of years ago Callaway started to sell golf balls advertised to go farther than "conventional" golf balls. One of the reasons said to contribute to improved performance was the design of the dimples. I went out and bought "conventional" and Calloway golf balls (I'm guessing in 2005 or 2006). The following photo comparison between conventional and Callaway clearly shows that the Callaway dimples are a little more distinct than the conventional dimples.

About that same time I got an email (long since lost) from a fellow who said he was working at Callaway and using CFD for their sports equipment. He said that previously he'd worked at Boeing, liked airplane CFD better than golf ball CFD, but that Callaway paid a lot better. Was CFD used to improve the golf ball performance? It seems possible that CFD at least contributed to the design. I looked at Callaway's web site and couldn't find any specifics on the design (as would be expected).