MAE90: Science and Engineering of Sport

Summer Quarter 2003

Drag and streamlinining

For Wednesday May 14, 2003.

Please read the following:

- Chapter 5 of *Life in moving fluids* by Steven Vogel (on reserve at S&H library).
- Sections 7.3 and 9.3 of *A brief introduction to Fluid Mechanics* by Young, Munson and Okiishi. Call numbersTA357 .Y68 2000. Denise and Eun should have copies.
- The chapter "The flight of the baseball" in Adair's book (on reserve at S&H library).
- The article on swimming at http://www.sportsci.org/news/biomech/-skeptic.html. Thanks to Denise for this reference.

I'm going to pick on Denise and Eun who've seen some of this material and ask them to give us a joint ten-minute mini-lecture on drag and streamlining. The rest of you please be supportive and do your part by reading the assigned material.

Please make sure you read about Reynolds number, dynamical similarity, and streamlining. If you don't understand something, prepare a question.

Finally: try and come up with an example of drag in a sport that interests you.