

**The University of Oklahoma
Norman, Oklahoma**

Mechanical Engineering
Bachelor of Science, May 2003

**NASA Academy Research
Project:
Use of the Martian Surface
Wind Tunnel to quantify
boundary layer processes that
trigger planetary dust storms.**

Principal Investigator: Dr. Jim
Phoremén



email: bdekock@ou.edu

Experience:

Although I dedicate many hours each day to throwing the Hammer for the University of Oklahoma Track and Field team, I do manage to make time for other more scholarly pursuits. After my freshman year, I went on a European Cultural and Historical tour through most of Western Europe. I decided then that along with my Mechanical Engineering Bachelor's Degree, I would get a minor in Spanish. My junior year, I had the opportunity to design a biomedical cell growth experiment using a polymer fiber blowing technology being developed at the University by Prof. Robert Shambaugh. We were studying the seeding behavior and mechanical properties of living tissue that was produced using the non-woven blown polymer substrates. That summer during a co-op term with Raytheon, I helped conduct some research into the feasibility of using new ultra-stiff alloys as the structural base of electro-optical systems. The results of this investigation were presented in September 2001 at a Raytheon Technology Symposium in Tucson, AZ.

The fall of 2001 I spent studying abroad at the Valencia Polytechnic University in Valencia, Spain. While there I was able to travel around much of Spain and really get a feel for what life is all about in that part of the world. I appreciated and savored learning the intricacies of the language and the culture that can't be taught in a classroom setting.

After finishing my Bachelor's Degree in May 2003, I plan to pursue a graduate degree in Flight Controls, Robotics, or Aircraft Structural Design.

Extra-Curricular Interests:

As mentioned earlier, training for the Hammer Throw is a big chunk of every day pretty much year-around. When I'm not in class, at the gym, or in the throwing circle, I'm usually outside. I am a certified SCUBA Diver, and enjoy the occasional trip to the Yucatan to check on my underwater friends. I love water sports and watercraft, from playing Marco Polo to tearing around the Oklahoma lakes on some ten-year-old jet skis kept alive through sheer persistence, to riding the wind in a sailboat when I can find one. I plan before I finish graduate school to become an avid hang-glider, although I have yet to take my first lesson. I'm always up for some pickup soccer or basketball, and I really enjoy backyard football. I have some indoor interests as well. The first is being a mentor to a very talented youngster at a local grade school, and the second is an occasional game of pool, snooker, and if I can find a table, no-pocket billiards.

Awards

BSA Eagle Scout (1997)

March of Dimes Oklahoma Male Scholar Athlete of the Year (1997)

Oklahoma Regent's Scholar (1998-2002)