

Imagination Takes Wing in Aerospace Engineering Classes

'Ultimately what separated the Wrights from their more illustrious rivals was their particular aptitude for learning how to do a difficult thing.'

— from *To Conquer the Air: The Wright Brothers and the Great Race for Flight*

One hundred years after the Wright Brothers soared over the North Carolina sand dunes in a powered flying machine, 13 Cal Poly aerospace engineering students are sharing the same spirit of discovery by building an aircraft of their own.

The students are enrolled in AERO 565 and 571, courses funded by \$15,000 from student academic fees. The courses focus on the construction of an RAV-7 single-engine airplane in a shop near the San Luis Obispo airport. Unlike the Wrights, who flew their wooden, cloth-covered aircraft up to 852 feet on December 17, 1903, the students' plane, made of state-of-the-art metals and plastic composites, will never get off the ground.

"To get the course started, we had to state it was strictly 'not for flight,'" says AERO Chair Dan Biezdard. "The plan is to have at least one formal class section per year, with students working year-round on senior projects related to the aircraft."

Biezdard, who says the RAV-7 may never be finished, adds, "The class was offered at student request to provide a 'hands-on' experience in the best tradition of the Aerospace Engineering Department."

This is not the first time Cal Poly students have emulated the Wrights. Students built a six-passenger replica of Charles Lindbergh's Spirit of St. Louis in 1928, only a year after the Cal Poly Aeronautical Engineering Department took flight. It was believed to be the first aircraft ever constructed by students in the United States.

— Dennis Steers
College of Engineering

Extra Credit

• Dairy Science Professors **Rafael Jimenez-Flores** and **Ed Jaster** were honored at the American Dairy Science Association's 2003 Annual Meeting. Jimenez-Flores won the **2003 Milk Industry Teaching Award** for his classroom teaching, his coaching of university dairy products judging teams and his mentoring of senior undergraduate students and their research projects. **Jaster**, nationally known for his research in dairy cattle nutrition, was elected **National Advisor to the Student Affiliate Division of ADSA**.

• The American Society of Agricultural Engineers presented Cal Poly professor emeritus **John L. Merriam** with the **2003 Kishida International Award** for his contributions to the irrigation industry, with special recognition for his work with developing nations, including designing and supervising construction of flexible supply pipeline demonstrations and production projects in Sri Lanka, India, Pakistan and Egypt. Merriam and his family established a variety of irrigation management and education endowments and founded the Merriam Irrigation Education Foundation.

STUDENTS

• **Anthony L. DeFont**, a Cal Poly mechanical engineering student, is among six students who received **The California State University's 2003-2004 William R. Hearst/CSU Trustees' Award for Outstanding Achievement**. Selection for the award is based on financial need, superior academic performance, outstanding volunteer service and the character to overcome profound personal challenges.

• **Jesse Segura** won the **National Intercollegiate Rodeo Association's 2003 National All-Around Cowboy** title during the June finals in Casper,

Wyo. He was awarded a \$6,500 scholarship and a \$35,000 sponsorship for competition next year on the Professional Rodeo Cowboy Association circuit. He was one of 12 Cal Poly Rodeo Team members to make the final competition.

• **Graphic Communication students** won six out of seven prizes in the **2003 Bookbuilders West book design competition** in San Francisco. Awards were given based on layout, typography and cover designs of a classic book. Industry professionals judged entries on creativity, success in meeting design objectives, and presentation.

• **A Cal Poly team of four students** took third place in **Walt Disney Imagineering's 2003 Imagine Nations Design Competition**. The group was one of only four student teams from around the world selected to make a final presentation of their creative proposal for a "cutting-edge entertainment center" and "state-of-the-art musical extravaganza" on San Francisco Bay. The Cal Poly competitors each received a \$1,000 prize, and their proposal is now on display at Disney Imagineering headquarters in Burbank.

• **A team of Cal Poly engineering students** drove off with two awards from **Future-Truck 2003**, a national student competition sponsored by the Ford Motor Co. Competing against 14 other university teams, Cal Poly won second place and \$750 in the category **Most Innovative Use of Virtual Instrumentation** and was named **Most Improved Team**.