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Participating Teams

- **North Carolina State University**
- **North Carolina Agricultural and Technical State University** ***(Greensboro, N.C.)***
- **Miami University**
- **University of Maine**
- **Temple University**
- **University of Central Florida**
- **Georgia Institute of Technology**
- **Savannah College of Art and Design**
- **Spartan School of Aeronautics**
- **Western Michigan University**

Students designing paper wings for flight from 80-foot dune at Nags Head, N.C.

Golden, Colo., Jan. 23, 2003 – Discouraged but determined to find a solution, Orville and Wilbur Wright returned to their bicycle shop in Dayton, Ohio to tackle the greatest challenge of the early 20th Century: how to conquer the skies in a flying machine.

Though it was a busy time of year for their bicycle business, the two brothers, who had always demonstrated a unique mechanical ability and intelligence, built a wind tunnel to observe the effects of how wind acted upon wings. While the rest of the world slept, the brothers worked in the back room of their shop, testing and measuring "lift" vs. "drag" – essentially discovering the secrets of flight. In 1903, the Wrights returned to Kitty Hawk, N.C., with a new flyer and recorded the first-powered flight in history with four successful attempts at Kill Devil Hill.

As part of the 100th Anniversary of the Wright Brothers First-Powered Flight, ten college engineering teams will attempt to hang glide on **April 5** from atop an 80-foot dune at Nags Head, near Kitty Hawk, using paper wings.

This will be the final portion of Energy Challenge 2003, a national, industrially focused competition that encourages students to design and build full-scale projects out of paper products. The paper hang gliders are to be constructed using materials such as corrugated paperboard or linerboard.

The U.S. Department of Energy, Institute of Paper Science and Technology (Atlanta, Ga.) and Kitty Hawk Kites, Inc. are sponsoring the event. The purpose of Energy Challenge is to increase interest in science and engineering and promote awareness of energy efficiency, manufacturing design, recycling, waste minimization, package maximizing and pulp and paper industrial processes.

(more)

ENERGY CHALLENGE

Participating teams include North Carolina State University, North Carolina Agricultural and Technical State University (Greensboro, N.C.), Georgia Institute of Technology, University of Maine, Miami University (Ohio), Temple University, Savannah College of Art and Design, Spartan School of Aeronautics (Tulsa, Okla.), University of Central Florida and Western Michigan University.

Each school received a $2,000 “start up” grant to assist with the funding of their glider and will have eight months to complete it.

Common paper chemicals may be used in the finishing and bonding stages. Merit points will be awarded to the teams that develop and use novel materials or chemicals from the wood.

A review committee will judge the paper hang gliders on: gross weight, material composition, conformance to the required sail area of 191 square feet, tear and tensile strength, moisture resistance, recycle content, aesthetics and novelty of design. Framing for the gliders will be provided. The first-place school will receive $15,000; second place, $10,000; third place, $5,000.

Teams will also be required to complete a weeklong “Hang One” Designation rating course under the direction of Kitty Hawk Kites, Inc. All glider pilots will be United States Hang Gliding Association (USHGA) certified and must comply with all USHGA safety protocol.

Editor’s note: For more information about Energy Challenge, see http://www.ipst.edu/energy_challenge. Immediately after the competition, broadcast quality images will be available for television. We also plan to post photos and results on the Web site, as soon as the competition ends.

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