UNH Places First in the International CanSat Competition

DURHAM, N.H. - Three, two, one . . . Amarillo we have lift-off! UNH WildCatSat not only had liftoff, they placed first in the 2008 Annual CanSat Competition held in Amarillo, Texas, June 13-15.

The UNH WildCatSat CanSat Team is a team that designed, built, and tested a can-sized satellite and then competed against various universities from the United States and Mexico during the annual CanSat competition. CanSat is a competition organized and sponsored by the American Astronautical Society (AAS), NASA Goddard Space Flight Center (GSFC), NASA Jet Propulsion Laboratory (JPL), US Naval Research Laboratory (NRL), Orbital Sciences Corporation, and the American Institute of Aeronautics and Astronautics (AIAA).

WildCatSat, a senior project and a newly recognized UNH student organization, is a multidisciplinary team consisting of electrical and mechanical engineering students interested in space-related engineering. The project provided participants project management skills and priceless hands-on experience in the complete life-cycle of a complex engineering project.

Student teams won prize money by building small "can" sized devices that were "launched and deployed from a rocket at an altitude of about 760 meters." Points were scored for control of the descent rate, landing orientation, postlanding operations such as making panoramic images, etc. UNH was the only team to successfully pass all mission requirements. The judging, however, was not just based on the launch. It was also based on the preliminary design report, concept definition report, and the post-mission presentation.

Faculty advisor and associate professor in UNH Mechanical Engineering, May-Win Thein said, "UNH impressed all the judges, especially for being a first-year team. In fact, I would not be surprised if we heard from the different organizations that were represented there (e.g., NASA Goddard Space Flight Center, Orbital Sciences, NASA Jet Propulsion Laboratory, US Naval Research Labs, etc) for recruiting purposes."

"All in all," continued Thein, "regardless of winning 1st place (or last place), I am very proud of our UNH students -- of their technical merit, presentation skills, and the professional manner with which they represented UNH."

The 2007-2008 UNH WildCatSat team members are: Rob Terry of Merrimack (team leader), Jim Gealy of Danbury, Zac Kelton of Saddle River NJ, Jeff Kite of Alton, Patrick Lee of Portsmouth, Dave Levine of Amherst (Electrical and Computer Engineering), Ryan Carney of Enfield, Chris Famalore of Middleton MASS, Chris Hill of Lincoln RI, Melissa Minuti of Manchester (Mechanical Engineering), May-Win Thein, associate professor Mechanical Engineering (faculty advisor), John Eric Arlington (technical advisor, Orbital Sciences and 2001 UNH ME alumnus), and Marc Lessard (technical advisor, UNH Space Science Center).



The Team Before the Launch

UNH Electrical and Computer Engineering and Mechanical Engineering seniors venture out to the southwest desert of Amarillo Texas, to test and launch their satellite during the 2008 CanSat Competition. Pictured (from left to right) are: Chris Famalore, Patrick Lee, Jeff Kite, Melissa Minuti, Chris Hill, Dave Levine, Ryan Carney, May-Win Thein, Rob Terry, John Eric Arlington, Zac Kelton, and Jim Gealy.



Final Adjustments

UNH Mechanical Engineering senior, Chris Famalore, makes the final adjustments to the UNH WildCatSat satellite before placing it in the rocket for the infamous launch, which along with support data helped the team place first among 20 various universities from the United States and Mexico.

TEAM LIST

The following schools entered teams in the contest: Iowa State University, MIT, Penn State, University of Alabama, Huntsville, University of New Hampshire, Washington University in St. Louis Team 1, Washington University in St. Louis Team 2, Virginia Tech Team 1, Virginia Tech Team 2, Ryerson University, Michigan Technological University, University of Michigan Team MaizeSat, University of Michigan Team 2, Hampton University, University of Texas, Arlington, Texas A&M, Instituto Technologico de Estudios Superiores de Monterrey, Technologico de Monterrey Campus Puebla, California State Polytechnic University, Pomona, Tuskegee University.

The CanSat Competition web site can be found at <u>www.cansatcompetition.com</u>.