@nmsu

Space Grant Consortium's rocket launch at Spaceport America a go for May 20

The New Mexico Space Grant Consortium's next space mission is a go for May 20. The SL5 rocket will take 27 student experiments and other cargo to space, 72 miles above Spaceport America.

Fate played an April Fool's joke on some aspiring rocketeers last month, but hopefully they'll get the last laugh.

The NMSGC had planned its third annual rocket launch April 1 at Spaceport America. The rocket designer created a new parachute system for the rocket, and it tested successfully March 28, but flight hardware was damaged after the test. The rocket now is ready to go.

An UP Aerospace SpaceLoft XL rocket screamed skyward May 4, 2010, powering high school and university investigations from across the state on a suborbital space trek. (Photo by Bob Martin KRQE-TV)

The launch is the culmination of a year of preparation and is sponsored by NASA's $2 million Summer of Innovation program. NMSGC competed in a national competition for these funds to improve science, technology, engineering and mathematics, or STEM, education. UP Aerospace, Inc. will launch the rocket into space. Twenty-one middle school experiments from 25 schools in New Mexico, one from Texas and one from Arizona, as well as three high schools, Dona Ana Community College, New Mexico State University and New Mexico

Tech will be on board. The rocket will be taken apart, experiments will be extracted and data from all experiments will be downloaded in the field after the launch. Infield de-integration is a first for this program. It helps students quickly see the data from their experiments so they can begin analysis immediately when they get back to school. About 700 students and 200 members of the general public will attend the launch, up from 100 just three years ago.

"We were one of 31 states that wrote a competitive proposal to NASA to be part of the Summer of Innovation, and New Mexico was one of only four that were selected, and we're the only state selected for a rocket launch project," said Pat Hynes, director of the NMSGC, housed at NMSU. "The program included a request by President Obama that we have 250,000 students across the nation involved in summer science, engineering and technology activities. The New Mexico Space Grant Consortium worked with 138 schools last summer and had about 2,500 students participate in summer institutes across New Mexico, four in El Paso, one in Arizona and one in Maine."

Through the Summer of Innovation grant the consortium was able to bring teachers from each participating school to NMSU last summer for an educational training session on the launch. NASA scientists, engineers and aerospace education specialists from Space Center Houston and White Sands Missile Range guided the teachers on parameters and ideas to help their students propose, develop and construct experiments to be housed in the rocket and launched into space.

"Every school had to propose an experiment, and each one was evaluated by members of the NASA science community, the American Institute of Aeronautics and Astronautics and volunteers from the Las Cruces Chamber of Commerce's Commercial Space Task Force," Hynes said. "Finally, 26 experiments were chosen to fly on the rocket."

Hynes noted that the launch will do more than just provide excitement for involved students, and even more than an educational experience.

"This is what the president has said our nation has to move towards - commercializing space," she said. "We're going to have to find

much cheaper ways to send people and cargo to space, and Spaceport America is going to be much cheaper to operate than Kennedy Space Center. The shuttle program spends monthly what it cost to build Spaceport America."

But make no mistake – the rocket launch also gives the participants "something very cool to do."

"They have to create a new product. Everyone built the experiments and payloads from scratch – students and teachers did it all," said Hynes.

Written by Mark Cramer.

©2008 NMSU Board of Regents – Legal Information