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STUDENT ROCKETEERS NATIONWIDE REACH FOR NEW HEIGHTS IN 2010-11 NASA STUDENT LAUNCH PROJECTS

HUNTSVILLE, Ala. -- The annual NASA Student Launch Projects rocketry challenge, now under way, promises to send aloft more rockets than ever before in its 11-year history. And some of them, for the first time ever, will splash down in the Atlantic Ocean instead of dropping into a North Alabama cornfield.

More than 500 student rocketeers from 25 states will take part in the 2010-11 launch projects. Nineteen middle school and high school teams will tackle the Student Launch Initiative, while 33 college and university teams will go head-to-head in the University Student Launch Initiative. NASA designed the twin projects to give science, mathematics and engineering students a taste of real-world experience, seeking to foster new generations of aerospace professionals to sustain NASA's science and exploration mission.

As in years past, all teams will build powerful rockets of their own design, complete with a working science or engineering payload they also design, install and track during flight. They also create project websites, write preliminary and post-launch reports and develop educational engagement projects for schools and youth organizations in their communities -- sharing their enthusiasm with even younger generations of future explorers.

In spring 2011, the teams will bring their rockets to NASA's Marshall Space Flight Center in Huntsville, Ala., where engineers developing the nation's next-generation launch vehicles will put the teams' creations through a rigorous flight readiness review and safety inspection. Then students will cluster at a nearby farm to launch their rockets as close as possible to an altitude of 1 mile, vying for a variety of awards for engineering skill and ingenuity. That "launchfest" is set for April 16, 2011.

But not all of this season's competitors will launch over Alabama. Three veteran university teams accepted NASA's "Level 2" challenge to tackle a new flight requirement: design, build and fly a rocket to a maximum altitude of 10,000 feet -- nearly twice the height of the traditional Level 1 university

competition. The Level 2 rockets will be launched May 21, 2011, from NASA's Wallops Flight Facility on Wallops Island, Va. They must make a water landing in coastal waters near the NASA test launch facility -- and the rockets stay afloat and intact in the water for one hour before pickup, with science payloads intact.

"So many of our NASA Student Launch Projects teams excel each year at the Level 1 challenge, we decided it was time to introduce a new goal to achieve," said Tammy Rowan, manager of the Marshall Center's Academic Affairs Office, which organizes the rocketry events each year. The Level 2 launch will be a demonstration, not a competition, she said -- but given the past performances of the three teams who accepted the challenge, Rowan said organizers anticipate a heated race to altitude just the same.

NASA extended Level 2 invitations to all college and university teams that placed in the top five finalists in the last two years of competition. Accepting the challenge are teams from Mississippi State University in Starkville, Mitchell Community College in Statesville, N.C., and the University of Alabama in Huntsville -- which placed second, fourth and first, respectively, in the 2009-10 launch challenge.

Level 1 of the University Student Launch Initiative remains a competitive event, sponsored each year by ATK Aerospace Systems of Magna, Utah, which awards $5,000 to the first-place winner. NASA's Science Mission Directorate in Washington also tweaked the Level 1 challenge, offering teams $5,000 each to build a specific payload -- one that will provide challenges similar to those encountered by NASA engineers designing future Mars landers. The payloads will measure pressure, temperature and other atmospheric conditions at regular intervals during descent and return the data remotely to the team on the ground. These entries also must include a global tracking system and an onboard camera that returns a minimum of five pictures. Nineteen of the 30 university Level 1 teams have opted to pursue this option for the current competition.

Participating 2010-11 NASA Student Launch Projects teams represent schools in Alabama, Arkansas, Arizona, California, Florida, Georgia, Hawaii, Iowa, Illinois, Indiana, Kentucky, Massachusetts, Maryland, Michigan, Minnesota, Mississippi, North Carolina, North Dakota, Pennsylvania, South Dakota, Tennessee, Utah, Virginia, Washington and Wisconsin. For a complete competitor list, visit:

http://education.msfc.nasa.gov/sli

http://education.msfc.nasa.gov/usli

The NASA Student Launch Projects are collaboratively sponsored by NASA's Exploration Systems Mission Directorate, Science Mission Directorate, Space Operations Mission Directorate and Office of Education Flight Projects. NASA held the first student launch event in 2001.

For more information about this and other NASA education initiatives, visit:

http://www.nasa.gov/education

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