United Launch Alliance and Ball Aerospace 2015 Student Rocket Launch Takes STEM Education to New Heights

Young Scientists from Kindergarten Through Graduate School Showcase Work in Unique, Hands-on Event

CENTENNIAL and BOULDER, Colo. *July 18, 2015* - High power sport rockets carried payloads thousands of feet above the plains of Pueblo, Colorado today at the United Launch Alliance (ULA) and Ball Aerospace & Technologies Corp. Student Rocket Launch. The event marked the culmination of an experience designed to simulate a real-life launch campaign and inspire students to pursue careers in science, technology engineering and math (STEM).

The launch featured three high power sport rockets built by interns at United Launch Alliance (ULA) - including the largest rocket to launch from Colorado. Ball Aerospace & Technologies Corp. interns build the four largest payloads (onboard experiments/instruments), while K-12 students from Colorado created 13 additional payloads.

"United Launch Alliance and Ball Aerospace have created a hands-on program that engages and energizes students from kindergarten through graduate school, said Colorado Gov. John Hickenlooper. "The STEM fields are critical to the future economy, and the student rocket launch gives tomorrow's rocket scientists and engineers a chance to build the skills they'll need to propel our state and nation into the future."

Working on their own time, the ULA and Ball interns designed, build and tested the rockets and the payloads with the guidance of mentors from both companies. Approximately 60 interns and 20 mentors from ULA as well as 30 interns and 26 mentors from Ball participated this year.

"Year after year,
exceptionally talented
summer interns amaze us
with their innovative
approach to challenges and
problem solving," said Jeff
Osterkamp, Ball's vice
president for Engineering.
"This program gives
students real-world
experience as they quickly
move from concept to
launch for their payloads."

"United Launch Alliance works to inspire students at all levels to pursue careers in science, technology, engineering and math," said Matt Smith, ULA's vice president of Engineering. "The Student Rocket Launch encourages innovation and provides a framework for them to take their ideas from the drawing board to the launch pad."

This year's lineup of rockets included the 25-foot tall "Future" which carried 14 payloads. The "Stars 'N' Stripes is a 20-foot rocket and carried two payloads, and the "Genesis, at 10 feet tall, deployed a single payload.

Ball interns, collectively known as BIRST (Ball Intern Rocket Science Team), designed, built and tested the four largest payloads. This year's concepts include: a tale on the classic egg drop engineering challenge, including atmospheric sensors and camera; R/C controlled para glider; launch locking systems and GPS locators; and a temperature -and shock-controlled vaccine package delivering system.

"Year after year exceptionally talented summer interns amaze us with their innovative approach to challenges and problem solving," said Jeff Osterkamp, Ball's vice president for Engineering. "This program gives students real-world experience as they quickly move from concept to launch for their payloads."

Thirteen K-12 student teams from Colorado also designed and built payloads that launched on the Future rocket. The payloads include "KinderRocks" decorated by kindergarteners, a test of solar power to slow payload descent, and instruments to capture images, location and other data.

The Southern Colorado Rocketeers (SCORE), Colorado Springs-based rocketry club (COSROCS) and Northern Colorado Rocketry (NCR) also launched rockets throughout the event.

About United Launch Alliance

With more than a century of combined heritage, United Launch Alliance is the nation's most experienced and reliable launch service provider. ULA has successfully delivered more than 95 satellites to orbit that provide critical capabilities for troops in the field, aid meteorologists in tracking severe weather, enable personal device-based GPS navigation and unlock the mysteries of our solar system.

For more information, on ULA, visit the ULA website at<u>www.ulalaunch.com</u>, or call the ULA launch hotline at 1-877-ULA-4321 (852-4321). Join the conversation at

www.facebook.com/ulalaunch, twitter.com/ulalaunch and instagram.com/ulalaunch.

About Ball Aerospace

Ball Aerospace & Technologies Corp.is a subsidiary of Ball Corporation. Ball Aerospace supports critical missions for national agencies such as the Department f Defense, NASA, NOAA and other U.S. government and commercial entities. The company develops and manufactures spacecraft, advanced instruments and sensors, components, data exploitation systems and RF solutions for strategic, tactical and scientific applications. Fore more information, visit http://www.ballaerospace.com.

Contacts:

United Launch Alliance

Christa Bell, (303) 269-5551 (Office), (720) 556-6304 (Mobile)

christa.m.bell@ulalaunch.com

Ball Aerospace:

Kendall Ackerman, (303) 939-7596 (Office), (720) 201-0262 (Mobile)

kackerma@ball.com

For further information: Roz Brown rbrown@ball.com or call 303-939-6146

https://ball.mediaroom.com/2015-Jul-18-United-Launch-Alliance-and-Ball-Aerospace-2015-Student-Rocket-Launch-Takes-STEM-Education-to-New-Heights