Finalists Announced For Orion's Exploration Design Challenge

Winning Radiation Experiment to Fly on Exploration Flight Test-1

HOUSTON, March 26, 2014 /PRNewswire/ -- Evaluators from Lockheed Martin [NYSE: LMT], NASA and the National Institute of Aerospace (NIA) have selected five teams from high schools in California, Illinois, Kansas, Utah and Virginia as finalists in the Exploration Design Challenge (EDC). The winning team will be announced in April at the United States Science and Engineering Festival in Washington, D.C., and will have their radiation experiment flown on Orion's first test flight, Exploration Flight Test-1 (EFT-1).

The five finalist teams were announced during a live webcast today, hosted by Lockheed Martin Orion Engineer Heather McKay and NASA Orion Program Astronaut Rex Walheim. The teams represent the following high schools:

- Team *LORE* from Summit View High School in North Hollywood, Calif.
- Team *Titan* Shielding Systems from Illinois Math and Science Academy in Aurora, Ill.
- Team *Erion* from Erie High School in Erie, Kan.
- Team *Aegis* from Herriman High School in Herriman, Utah.
- Team *ARES* from Governor's School for Science and Technology in Hampton, Va.

The students' reaction to their selection and the entire webcast can be seen online at: http://new.livestream.com/viewnow/NASAEDC

"Each of the EDC entrants presented unique and well thought out ideas," said Joe LeBlanc, Lockheed Martin's EDC requirements and EFT-1 installation lead. "We have been very impressed with the quality of research, the depth of knowledge, and the level of critical thinking with each design. The selection process has been and will continue to be incredibly challenging."

NASA, Lockheed Martin and NIA launched the Exploration Design Challenge on March 11, 2013. The challenge provides educators and students an opportunity to tackle one of the major risks of long-duration space exploration – the dangers of radiation, and the need to protect astronauts as they venture to places never before explored by humans.

U.S. high school students were tasked to design an experiment to protect a dosimeter, an instrument used for measuring radiation exposure, as Orion flies through the Van Allen Belt during EFT-1. The Van Allen Belt is a dense radiation field that surrounds the Earth in a protective shell of electrically charged ions. Understanding and mitigating radiation exposure during Orion's test flight can help scientists develop protective solutions before the first crewed, long-duration spaceflight.

In addition to having their design fly on EFT-1, the winning team will be invited to Kennedy Space Center in Florida to watch their payload launch into orbit later this year.

Students in grades K-12 from around the world can also be part of Orion's first flight by completing a radiation shielding challenge activity that can be found online at www.nasa.gov/education/edc . Students who complete the challenge by June 30, 2014 will have their names flown on Orion.

Headquartered in Bethesda, Md., Lockheed Martin is a global security and aerospace company that employs approximately 115,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The Corporation's net sales for 2013 were $45.4 billion.

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For more information about Orion visit:
http://lockheedmartin.com/orion

http://www.nasa.gov/orion

For more information about the EDC visit:
http://www.nasa.gov/education/edc/
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