



Space Technology Game Changing Development

Monthly Highlights

October 2012

Annual Program Review Held at NASA HQ



HRS engineer Roger Rovekamp shows off the new Exoskeleton.

2012 was a busy and productive year for NASA Space Technology's Game Changing Development Program. We had the opportunity to convey our many achievements during the annual program review held at NASA HQ Oct. 23-25. Principal investigators and project managers traveled to Washington, D.C., to present their projects' many accomplishments throughout the past year.

We experienced many "firsts," including an exceptional flight test of IRVE-3, a first-ever demonstration of a laser beacon tracking function using a 32

photon counting detector array for Deep Space Optical Communications; many successes such as completed TDU hardware for nuclear systems and Arc Jet testing of ADEPT and Woven TPS materials, as well as the development of Human Robotics Services Exoskeleton and the announcement of several new projects and formulation activities for the upcoming year. Add to that, the number of outreach activities increased, and we developed our first integrated Game Changing Development Program exhibit and showcased it to thousands at the Endeavour SpaceFest event in Los Angeles, Calif.



Our first annual program review was held in October and was highly attended.



Game Changing Education and Public Outreach

SpaceFest Part of Endeavour Opening Activities



As part of the grand opening activities for Space Shuttle Endeavour, NASA presented SpaceFest, a six-day exhibit at the California Science Center at Exposition Park in Los Angeles, Oct. 30-Nov. 4.

NASA's SpaceFest was free to the public and included three dozen exhibits, displays, and educational demonstrations honoring aeronautics and space exploration past, present, and future.

NASA Space Technology's Game Changing Development Program participated in the event by showcasing several of its projects, including: IRVE-3, Adept, Composite Cryotanks, Additive Manufacturing technologies and Woven TPS. Visitors to SpaceFest learned about current NASA research missions, future space travel, and NASA involvement in enhancing aeronautics. The event also provided an opportunity for guests to meet and hear current and former astronauts speaking about their experiences.

See photos on page 3.

In the News: Solar Array Makes Headlines in Times Square

An ATK news release announcing that it will be developing a solar array prototype (MegaFlex) for NASA Space Technology's Game Changing Development Program was featured on the billboard in New York City's Time Square recently. NASA Space Technology recently announced it would fund two proposals for the development of solar arrays for future spacecraft. Game Changing sponsored this solicitation and will manage the technical aspects of the technology development under the first phase of development. NASA's Glenn Research Center will manage the awarded contracts for the agency's Space Technology Program under both phases.



Game Changing Education and Public Outreach

Game Changers Support SpaceFest

Game Changers Neil Cheatwood, RJ Bodkin, Greg Swanson, Mairead Stackpoole, Paul Wercinski, Amy Johnson and exhibit specialist Dustin Hitt supported the event and spoke with hundreds of students, teachers and members of the general public. Former astronaut and Associate Administrator for Education Leland Melvin and Associate Administrator for Communications David Weaver also stopped by our booth.



Leland Melvin and David Weaver pose with a visiting student.



Neil Cheatwood talks about the IRVE-3 project.



Greg Swanson, RJ Bodkin and Amy Johnson man the booth.



Paul Wercinski of NASA Ames speaks with museum visitors about the ADEPT Game Changing Development project.



Mairead Stackpoole of NASA Ames explains the history of thermal protection systems, from shuttle tiles, to a Woven TPS.

Game On!
<http://gameon.nasa.gov>



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