



Announcing Student Spaceflight Experiment Program (SSEP) Mission 3 to the International Space Station



New Opportunity for Schools to Engage Grade 5-16 Students in Microgravity Experiment Design for Flight to the International Space Station

For Immediate Release

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Washington, D.C. - The [National Center for Earth and Space Science Education \(NCESSE\)](#), in partnership with [NanoRacks LLC](#), announces a new opportunity for schools across the U.S. and Internationally to participate in the fifth flight opportunity for the Student Spaceflight Experiments Program (SSEP).

Launched in June 2010, SSEP immerses typically 300 students across a community in real scientific research of their own design, using a highly captivating spaceflight opportunity on the International Space Station (ISS), America's newest National Laboratory. SSEP is a Science, Technology, Engineering, and Mathematics (STEM) education immersion program that provides a truly authentic research experience on the high frontier.

SSEP Mission 3 to ISS will provide each participating community a real research mini-laboratory capable of supporting a single microgravity experiment, and all launch services to fly the mini-lab to ISS in early April 2013. Each participating community will solicit proposals for microgravity experiments from their students, with each student research team vying for use of the mini-lab. A formal review of proposals received from across the community will determine the experiment selected for flight. SSEP is designed to mirror the proposal process undertaken by professional researchers vying for research resources. Additional SSEP program elements leverage the experience to engage the entire community, embracing a Learning Community Model for STEM education.

SSEP is open to schools and school districts serving grade 5 through 12 students, 2- and 4-year colleges and universities, informal science education organizations, and internationally through the Center's new [Arthur C. Clarke Institute for Space Education](#).

Student teams are able to design experiments across diverse fields, including: seed germination, crystal growth, physiology and life cycles of microorganisms, cell biology and growth, food studies, and studies of micro-aquatic life. Experiments require design to the technology and engineering constraints imposed by the mini-laboratory, and flight operations to and from low Earth orbit.

"SSEP is designed to empower the student as scientist, and within the real-world context of science. Student teams design a real experiment, propose for a real flight opportunity, experience a formal proposal review process, and go through a NASA flight safety review. They even have their own science conference at the Smithsonian's National Air and Space Museum, where they are immersed in their own community of researchers", said Dr. Jeff Goldstein, creator of SSEP and NCESSE Center Director. "SSEP is about introducing real science to our children, and if you give them a chance to be scientists, stand back and be amazed."

SSEP Mission 3 to ISS includes an experiment design competition September 17 though November 9, 2012. Flight experiments are selected by December 7, 2012, for a ferry flight to ISS in early April 2013. All communities participating in Mission 3 to ISS must be aboard by September 12, 2012.

Heritage: The first two SSEP flight opportunities on the final flights of Space Shuttles Endeavour and Atlantis (STS-134 and STS-135), engaged 27 communities, providing a combined 30,700 grade 5-14 students the opportunity to participate, 977 student team proposals were received, and 27 experiments were selected and flown on the Shuttles. The third SSEP flight opportunity, Mission 1 to ISS, engaged 12 communities, providing 41,200 grade 5-14 students the opportunity to participate, 779 student team proposals were received, and 15 experiments were selected for flight to ISS on SpaceX's Dragon scheduled for launch in May 2012. The fourth SSEP flight opportunity, Mission 2 to ISS, began on March 5, 2012, with 11 participating communities. The Mission 2 experiments payload is slated to fly to ISS in Fall 2012.

SSEP is the first pre-college STEM education program that is both a U.S. national initiative and implemented as an on-orbit commercial space venture. SSEP is undertaken by the [National Center for Earth and Space Science Education \(NCSSE\)](#) in partnership with [NanoRacks LLC](#). SSEP is enabled through NanoRacks, which is working in partnership with NASA under a Space Act Agreement as part of the utilization of the International Space Station as a National Laboratory.

For information on the Mission 3 to ISS flight opportunity, visit: <http://ssep.ncesse.org>

Other Links of Interest:

[SSEP 3-Page Overview PDF](#)

[Program Description Video Clip](#)

[SSEP Participating Communities and Partners](#)

[Selected SSEP Flight Experiments](#)

[SSEP In the News](#)

[Program Impact from Teachers, Students, and Community Leaders](#)

Video highlights from the [2011 SSEP Conference, Smithsonian's National Air and Space Museum](#)

About NCSSE

The [National Center for Earth and Space Science Education \(NCSSE\)](#) creates and oversees national initiatives addressing science, technology, engineering, and mathematics (STEM) education, with a focus on earth and space. Programs are designed to provide an authentic window on science as a human endeavor. Central objectives of the Center's programs are to help ensure a scientifically literate public and a next generation of U.S. scientists and engineers - both of which are of national importance in an age of high technology. NCSSE is a Project of the Tides Center. <http://ncesse.org>

About NanoRacks, LLC

[NanoRacks LLC](#) was formed in 2009 to provide quality hardware and services for the U.S. National Laboratory onboard the International Space Station. NanoRacks now has two research platforms onboard the U.S. National Laboratory that can house plug and play payloads using the Cube-Sat form factor. Our current signed customer pipeline of over 50 payloads, including domestic and international educational institutions, research organizations and government organizations, has propelled NanoRacks into a leadership position in understanding the emerging commercial market for low-earth orbit utilization. Visit us at www.nanoracks.com and @nanoracks

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