

## Explorer Teacher Flights

The ZERO-G Corporation proposes *Explorer Teacher Flights* for the Space Education and Training programs competition within the *2005 Florida Space Research & Education Grant Program*. The proposed pilot program offers an innovative method of building enthusiasm among Florida teachers and students for space and leverages resources already in place at Florida's NASA Explorer Schools by providing selected teachers with truly inspirational, experience-based professional development.

NASA's new vision involves a significant contribution to the education of future mathematicians, scientist and engineers by engaging students and educators in NASA sponsored programs designed to inspire them and motivate them to learn more. NASA also believes that to challenge students, educators must be provided with the tools, experiences, and opportunities to further their education and participate in unique NASA learning experiences.

NASA's Explorer Schools program, designed to bring engaging mathematics, science, and technology learning to educators and students is one of NASA's main education directives. An objective of the program is to "Increase the active participation and professional growth of educators in science, mathematics, and technology." Explorer Teacher Flights will help to meet the goals of the Explorer Schools Program, and provide incredible outreach for the agency as they prepare to return to human flight. The program will also help to publicize Florida's commitment to the aerospace industry and math, science and space education.

Every year partnerships among NASA and 50 new NASA Explorer School teams across the country are awarded on a competitive basis. Schools work with education specialists from NASA Centers in an effort to spark innovative science and mathematics instruction for students. While partnered with NASA, the schools acquire new NASA teaching resources and technology tools in an effort to provide exciting learning experiences in science, mathematics and technology for students.

*Explorer Teacher Flights* can take the realm of exciting learning experiences a lot farther. The program will launch teachers and their classroom experiments into weightlessness aboard G-Force One as they experience parabolic flight maneuvers. This exhilarating ride of a lifetime is the only way that they can experience microgravity. There is no other experience on earth that can let them feel like they are astronauts, and no one readily available to explain to their students what it feels like to escape the earth's gravitational pull.

The program supports the expansion and diversification of Florida's aerospace industry by increasing statewide academic involvement in education and training programs that are consistent with the state's space industry priorities. By building the program through Florida-based NASA Explorer schools, the program leverages existing NASA resources and helps to generate an infrastructure for continued flights for Florida teachers. The pilot program will be used to attract and leverage other federal and private funding to promote the program for non-explorer schools throughout Florida in the future.

As the first of its kind in the nation, the *Explorer Teacher Flights* will also demonstrate Florida's leadership in supporting space education and emerging aerospace enterprises. Teachers from Florida's three current Explorer schools and not-yet announced awardees, will participate in the program, assist with dissemination and project promotions. The program is an amazing way to demonstrate Florida's

commitment to the expansion and diversification of Florida's Aerospace Industry through education.

Through *Explorer Teacher Flights*, Florida can ensure that the state promotes the NASA mission, provides a conspicuous commitment to developing a well-qualified workforce, and promotes the state's desire to diversify and expand Florida's government and commercial aerospace industries.