The Giant AWAKENS.

Will the residents need to be evacuated? Will the hurricane make landfall?

The giant awakens and the skies darken as ash and soot rain down on a remote tropical island. The ticking time bomb dormant for many years has awakened and residents of Montserrat Island worry about their fate.

As the erupting volcano's lava begins to devastate the countryside, Challenger Space Center scientists learn a hurricane is approaching. During the process of transmitting information about the volcano and hurricane to Challenger Space Center Mission Control, a satellite gathering vital life-saving data malfunctions.

With this medley of disasters looming, scientists at the Challenger Center rush to assemble a team of specialists to assist the island residents.

Will the residents need to be evacuated?
Will the hurricane make landfall?

These are the questions that students from across the country will answer as part of a new electronic distance learning program offered by the Challenger Space Center in Peoria, Arizona.

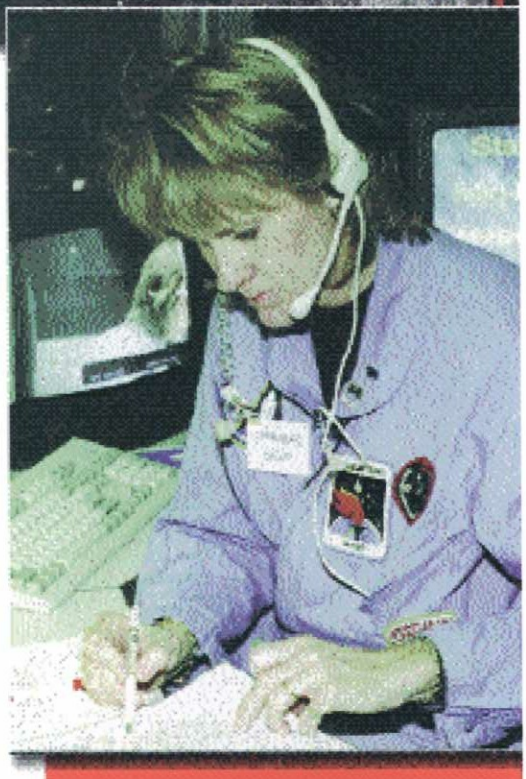
e-Mission

Operation Montserrat Island, a new electronic mission, connects a Flight Director at the Challenger Space Center in Peoria, Arizona, with a classroom anywhere in the world for a unique learning adventure. With the help of computers, the Internet, and a small video camera, students interact with a Peoria-based Flight Director to track the hurricane, predict volcanic rock fall, and determine how these conditions will impact the island's air, land, water, and vegetation.

Operation Montserrat Island allows students to participate as Earth Systems science experts. Student specialists will be members of the volcano, hurricane, or communication teams during the two-hour electronic mission. Operation Montserrat Island engages students to work as scientists in order to solve problems in real-life situations. Students will be called upon to determine:

- What impact will winds and falling ash from the volcano have on plant life?
- How far is the hurricane from the island?
- Should residents be evacuated and, if so, what are the possible routes?

The mission challenges students to apply their mathematics and science knowledge to a real-life event.



The Curriculum

Operation Montserrat Island is an interactive method for teachers to effectively utilize technology in the classroom. While computers exist in many classrooms across the country, content material designed to enrich the mathematics and science curricula is lacking.

This unique distance learning program meets state and national education standards in the areas of mathematics and science for students in 6th through 12th grade. Operation Montserrat Island builds students' enthusiasm for science and math, improves problem-solving and critical thinking skills, and teaches students the importance of teamwork and communication.

Operation Montserrat Island affords students in remote areas, who may not be able to visit the Challenger Space Center, the opportunity to experience learning through simulations.

For teachers, the mission is a new way to introduce Earth Science into classroom instruction. Prior to the mission, teachers participate in two days of training to acquaint them with the scenario. They leave the training with a pre-flight curriculum for the students designed for incorporation into daily lesson plans three weeks prior to the mission. The mission package also includes technology support to help the teachers prepare their classrooms for mission day.

CHALLENGER
space center

The Challenger Space Center in Peoria, Arizona, is part of a growing network of Challenger Centers nationwide established by the Challenger Center for Space Science Education in memory of the ill-fated Challenger Space Shuttle. The Challenger Space Center provides students with unique hands-on learning experiences designed to foster interest in math, science, and technology.

The Challenger Space Center, which is also a Smithsonian Institution affiliate, is a unique 23,000-square-foot facility that includes a "high tech, high touch" Space Station, complete with on-board laboratories, that gives students the simulated experience of working in space. During an on-site space mission scenario, part of the team of student-scientists work on the Space Station, while their teammates work in a realistic Mission Control center, modeled after NASA's Johnson Space Center in Houston.

CHALLENGER
space center

21170 North 83rd Avenue
Peoria, AZ 85382
Information: 623.322.2001
Fax: 623.322.3716
www.azchallenger.org

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