

Situation Overview

Situation News Brief Update

On September 4, 1996, the most dangerous place to be in the world was the island of Montserrat. The volcano that had given birth to this Caribbean paradise was now threatening to destroy it. For several months the island's residents had been anticipating a potentially catastrophic eruption and had begun the evacuation process. They didn't expect the tropical storm brewing 400 miles away would head in their direction, developing into a full-blown hurricane.



Your job is to act as the Emergency Response Team that works with local and NASA authorities to save the people of Montserrat.

The small island of Montserrat measuring about eight miles wide and fourteen miles long, is located in the Caribbean about thirty-five miles southwest of the better known island of Antigua.

On the island of Montserrat the Soufrière Hills volcano, located in the southern half of island, has been erupting for the past six months and is now becoming very active with a high probability of a major eruption occurring during the next twenty-four hours. During the past few days the volcano has expelled an estimated 600,000 tons of ash that has forced the evacuation of all towns south of Plymouth and southwest of the volcano. The initial population of the island was 12,864 however during the past six months some 4,438 people have fled the island in fear of the current events.

To worsen the current situation there is also a category 3-hurricane moving in a westerly direction heading directly towards the island and could potentially hit the island within the next twenty-four hours.

You are members of an Emergency Response Team (ERT) that have volunteered to help the remaining islanders deal with the current events. The responsibilities of the ERT are to ensure the safety of the islanders. Your ERT is comprised of specialized Earth System Scientists (ESS) and individually you will serve as an ESS in a specific area as Communicators, Evacuation specialists, Hurricane specialists, or Volcano specialists.

As Communicators and Earth System Scientists (ESS) it is your responsibility to do what ever you can to ensure the safety of the remaining residents on Montserrat during these troubled times.

You will form your teams based on the responsibilities defined on page two of this document.

As members of the ERT you will work together to analyze and evaluate situations affecting the island of Montserrat, prepare reports on the status of all potential dangers to the island, and make recommendations to the remaining 8,426 islanders with regards to their safety.

Currently NASA is in the process of launching a shuttle crew in an attempt to repair a damaged satellite. This satellite, once repaired, will be gathering critical information regarding the volcano and hurricane. This information will be provided to you in a real time data format for your analysis and interpretations.

Your Responsibilities

Communicators

As Communicators you are responsible for the accurate and timely communication between Mission Control and your Emergency Response Team (ERT) members. You will also be responsible to ensure the other ERT members are actively engaged in accomplishing their responsibilities.

Volcano ESS

As Volcano ESS team members you are responsible for the collecting of real time data regarding the current status of the volcano and its activities. You will use this real time data in calculations and to form opinions of potential changes in the volcano's behaviors. You will then provide your information and predictions to the other ERT team members for any effect your information may have on their activities and overall assessment of the situation on the island and how your information may impact the safety of the islanders.

Hurricane ESS

As Hurricane ESS team members you are responsible for the collecting of real time data regarding the current status of the hurricane. You will use this raw data to determine the path and speed of the hurricane and the potential impact on the island. You will then provide your information and predictions to the other ERT team members for any effect your information may have on their activities and overall assessment of the situation on the island and how your information may impact the safety of the islanders.

Evacuation ESS

As Evacuation ESS team members you are responsible for the collection and interpretation of data from the other ERT members. It is your responsibility to ensure the accuracy of the data being provided to you and for the tracking of events on the island. Your responsibilities include the planning and development of evacuation procedures and ensuring these recommendations are delivered to the islanders in an accurate and timely manner for their safety. You will also provide your procedures to the other ERT team members for any effect your information may have on their activities. You will be required to track and record the progress and compliance of your recommendations by the islanders.

For more information, please contact Challenger Space Center of Arizona at 623-322-2001