



Briefing Sheet: **Evacuation Team**

Sept 4, 1996: Mission Directives

The Mission

Barring any new developments on Montserrat, at the beginning of the e-Mission, the Space Shuttle's crew will repair the Low Earth Orbiting Satellite. If the repairs are successful, you will begin to receive important data that will update your Emergency Response Teams on the situation both on Montserrat and within 500 miles of the island.

You will prepare reports on the status of all potential dangers to the island.

Good luck,
Mission Control

Team Tasks

Appoint people to the following tasks:

- Runner to Comm Team. Select one or two spokespersons to interact with the Communications Team
- Runner to Volcano Team. Select one spokesperson to interact with the Volcano Team
- Runner to Hurricane Team. Select one spokesperson to interact with the Hurricane Team
- Recorder. Select one person to write down all questions from mission control and to respond back to mission control with written notes to be given to the Data Officer. This person should also take notes on all recommendations made and the effects of those decisions (optional).
- Reporter. Select one person to update a "graphic organizer" every few minutes so that each team can tell what is going on at a glance. The organizer should be a white board or chalkboard posted on the wall for all the teams to see.

Situation Report

Sept 2nd, 1996

Soufriere Hills volcanic activity

The danger zone on Montserrat includes the area from Broderick's Estate, south to Old Fort Point and all areas south of the Aymer's Ghaut river. On Sept 3rd, these areas were 100% evacuated. That places more pressure on the housing and shelters in the north of the island.

The volcanic activity now threatens all areas flanking the volcano, including some areas surrounding the Belham River Valley.

The British and the local government are encouraging voluntary, off-island evacuation. Displaced persons will receive financial assistance. Details will come later in the week. Evacuees will first go to Antigua then to the United Kingdom and other Caribbean Islands. Teams of emergency workers have been mobilized including members from the police, immigration, customs, Red Cross, and the National Office of Disaster Services. Nurses sent to Montserrat last week from Grenada and St. Lucia are safe and are being kept updated.

Sept 3rd, 1996, GMT 17:00:00

Hurricane Bob is bearing down on the island. The eye of the storm is 460 miles away, traveling due west at 10 miles per hour. The outer rain bands circle the eye at a distance of 150 miles. Expected time of arrival for the first phase is less than 48 hours. The hurricane is currently a category 3, with wind speeds steady at 120 mph and gusts of up to 160 mph. Storm surge is 11 feet. All ports are closed; boats and airplanes have been halted.

The volcano at Soufriere Hills has shown seismic activity nearly three times previous levels in the last few weeks. Earth scientists expect it could erupt explosively at any time. Small lava/mud flows have been sighted on the east side of the island in the Tar River Valley. Ash plumes and raining ash are constant and are creating difficulties for visibility.

Mission Preparation

- Organize your notes about the current status of the Soufriere Hills volcanic activity and Hurricane Bob.
- Make a list of effects you would see on the island if the volcano erupted. Make a list of effects you would see on the island if a hurricane hit.
- Develop three sets of contingency plans for risk management: 1) if the volcano erupted, 2) if the hurricane hit, 3) if both events occurred simultaneously. Your plans should consider the following:
 - Zones or areas of higher and lower risk. Draw these on your maps
 - Town populations- which might need to be evacuated before others?
 - How many residents do you estimate are in each town that needs to evacuate?
 - What is your evacuation plan?
 - Where will evacuees be housed both for the short and long term?
 - What arrangements for water, food, and shelter need to be made?
 - What would you recommend evacuees bring with them?
 - Road conditions- which roads are likely to wash out or be affected?
 - When to institute mandatory or voluntary orders.

Montserrat: Background Information

Montserrat: The Caribbean As It Used to Be June 26, 1988

For centuries Montserrat was a small, half-forgotten island in the Caribbean, overshadowed by the more coveted islands of Antigua to the northeast and Guadeloupe to the south. It is only 14 miles long by 8 miles wide, and it has only one port of entry, Plymouth, the only town of any size. From the azure seas that surround the island, the lush, fertile terrain quickly rises to a series of peaks of volcanic origin. The highest is Chance's Peak at 3,000 feet. Because of Montserrat's small size, lack of alternate ports, and hilly terrain, the island never played a leading role in the West Indian sugar industry. But what was once a drawback has now become a tremendous asset. Montserrat remains a peaceful, unspoiled, friendly place. It is poised to become a coveted tourist destination for adventurous travelers.

Montserrat has one airport, and most visitors arrive here by small plane from Antigua. As you cross the mountains on a narrow paved road to reach Portsmouth, you realize why it has been nicknamed the Emerald Isle of the Caribbean. The scrub vegetation and turquoise waters along the coast give way inland to a deep-green rainforest where huge tree ferns and philodendron leaves lord over tiny pink impatiens and wild orchids. Many trails lead through these forests. The most popular trails lead to the island's natural wonders. At the Great Alps Falls the stream drops 70 feet into a lovely natural grotto. The Soufriere Hills are blanketed with rainforest and volcanic peaks. Galway's Soufriere is a surreal setting of bubbling muddy water, steamy fumaroles, hot sulfurous springs, and other volcanic curiosities. Galway's Plantation is the newly excavated ruins of a 17th-century plantation. And the Bamboo Forest features bamboo canes up to 80 feet high that creak in the gentle winds that rise from the sea. The government is committed to maintaining these trails and developing new ones. With few cars, more than one hundred miles of paved roads, extremely friendly people, beautiful trails, and government support, Montserrat is a hiker's paradise. For a truly memorable outing ask for Melvin Clifton in Plymouth.



Montserrat is nicknamed the Emerald Isle for more reasons than its physical similarities with the island of Ireland. Among the original European settlers were Irish Catholics who migrated here from the British island of St. Kitts. Many place names, such as Galway, hark back to those times.

Some people swear that Montserratians speak with a bit of the Irish brogue. St. Patrick's Day is a national holiday, and visitors' passports are stamped with a shamrock!

When you reach the capital of Plymouth, home to a quarter of the island's 13,000 residents and reputed to be the cleanest town in the Caribbean, you get the feeling you have gone back in time to the reign of the British Empire. Large shade trees and Georgian-style homes, reputedly built from the ballast brick of early sailing vessels (gold and other treasures became the ballast for the return voyage to Europe), line the town's main street.

Set on a hill, Government House is vintage Victorian architecture surrounded by tropical gardens. Two shops sell beautifully made towels, shawls, and other items woven out of locally grown sea-island cotton. The beach



here (like most beaches on Montserrat) has black sand, a quaint reminder of the island's volcanic past. Interesting sites found near Plymouth

include Fox's Bay Bird Sanctuary, swampy home for herons and other coastal birds; the Montserrat Museum, a collection of artifacts and exhibits set in the former windmill of a sugar plantation; and Rendezvous Bay, Montserrat's only pale-sand beach.

Beginning in the 1970s, famous rock stars began visiting our island! Did you know that the Englishman George Martin, producer of most of the Beatles' albums, installed a complete state-of-the-art recording facility on a hilltop above Plymouth, and singers the likes of Jimmy Buffett were often glimpsed in town! We have a medical school, and its students rent our rooms, eat our food, and explore our island, greatly adding to the modest economy.

When Hurricane Hugo churned over us in 1989, we suffered great damage. Crops were lost, trees were downed, and many houses lost their roofs. But we recovered, and five years later the ravages of the hurricane were scarcely noticed by newcomers to the island.

Fast Facts about Montserrat

[source: CIA World Factbook 1995]

- **Location:** Eastern Caribbean, 16° 45 minutes North latitude and 62° 12 minutes West longitude
- **Area:** 100 sq. km./ 40 sq. mi. Coastline: 40 km.
- **Climate:** tropical
- **Population:** 13,000
- **Life expectancy:** 78 years
- **Ethnic groups:** black, white
- **Religions:** Anglican, Methodist, Roman Catholic, other Christian denominations
- **Language:** English
- **Literacy:** 97 percent
- **Dependency status:** overseas territory of the United Kingdom
- **Capital:** Plymouth
- **Flag:** blue, with flag of UK in one corner and Montserrat's coat of arms
- **National flower:** lobster claw (heliconia, banana-like plant with showy bracts)
- **National bird:** Montserrat oriole (black and yellow, native to Montserrat's mountains)
- **Economy:** unstable because of volcanic activity
- **Industries:** tourism, rum, textiles, electronic appliances
- **Agriculture:** cabbages, carrots, cucumbers, tomatoes, onions, hot peppers, livestock products, limes
- **Currency:** 2.7 East Caribbean dollars equal 1.0 U.S. dollar
- **Transportation system:** Montserrat is a relatively poor economy so everyone does not have a car. Most public transportation originates from Plymouth City. This consists of a fleet of 8 forty-passenger buses. Each bus can hold approximately 30-40 passengers. The main road that circle Montserrat is Windy Hill Road. It is a 2 lane paved road.

