



# Briefing Sheet: Hurricane 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

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### Team Tasks

Appoint people to the following tasks:

- **Data Analysis.** Select one person to record the real-time data on the Hurricane Tracking Data Sheet. This person will need to work with the Mapping person to analyze the data.
- **Mapping.** Select one person to chart the course of the storm on the map. They will need to make measurements as well.
- **Recorder.** Select one person to fill out the Report Form every five minutes. They should also write down all questions from mission control and respond back to mission control with written notes to be given to the Comm Data Officer.
- **Runner to Comm Team.** Select a spokesperson to interact with the Communications Team (may be combined with Recorder)
- **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.
- **(optional) Runner to Volcano Team.** Select one spokesperson to interact with the Volcano Team
- **(optional) Runner to Evacuation Team.** Select one spokesperson to interact with the Evacuation Team

### Your Task

Before the Mission Begins, your team should practice analyzing hurricane data. You should be able to:

- Receive real-time data for the storm and predict its movement, strength, and category.
- Plot latitude and longitude coordinates on the tracking map.
- Calculate speed of the storm and estimated time to landfall.
- Determine whether there is any predicted danger, and the degree and type of danger.
- Prepare a report form every five minutes to be read to Mission Control by the Communicator.



### Report Form: Hurricane Team

ADV	Lat. North	Lon. West	GMT	Wind Speed km(mi)	Press.	Category	Distance traveled km (mi)	Speed kph (mph)	Direction of Hurricane	Distance to Island km (mi)	ETA Montserrat (hrs.)

Shaded areas should NOT be reported to Mission Control.



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## Hurricane Tracking Data Sheet

	A	B	C	D	E	F	G	H	I	J	K	L
	ADV	Lat. North	Lon. West	Time GMT	Wind kph* (mph)	Pressure	Saffir- Simpson Hurricane Scale	Distance traveled km (mi)	Speed kph (mph)	Direction of Hurr.	Distance to Island km (mi)	ETA Montserrat (hrs.)
Archived	21			09/3: 2100								
	22			09/3: 2230								
Real Time Data	23			09/4: 0000								
	24			09/4: 0130								
	25			09/4: 0300								
	26			09/4: 0430								
	27			09/4: 0600								
	28			09/4: 0730								
	29			09/4: 0900								
	30			09/4: 1030								
	31			09/4: 1200								
	32			09/4: 1330								
	33			09/4: 1500								
	34			09/4: 1630								
	35			09/4: 1800								
	36			09/4: 1930								
	37			09/4: 2100								

### For Reference: Saffir-Simpson Hurricane Scale

Winds*	Category	Severity
Less Than 118 kph (74 mph)	Tropical Storm	very weak
119-152 kph (74-95 mph)	1	weak
153-177 kph (96-110 mph)	2	moderate
178-209 kph (111-130 mph)	3	strong
210-248 kph (131-155 mph)	4	very strong
above 248 kph (155 mph)	5	devastating

\*Note: Most weather stations and meteorologists measure wind speed in "knots". Popular media converts this to "kilometers per hour" (kph), or "miles per hour" (mph).