

Communications Team Mission Day Instructions

Overview

The Communications Team is responsible for making sure that Mission Control has a steady supply of reports on team activity. You will be receiving report forms every five or six minutes from each of the teams in your command center and any messages about crisis management. The Communications Team must make sure that these messages are transmitted to Mission Control in a timely fashion.

Your Task

Each team should deliver a completed data report form to you every five or six minutes. If this does not occur, you may have to go and get it from them to give Mission Control the most up-todate information available. Once you receive the data report form, make sure that all columns are completed and then report <u>only the shaded columns</u> to Mission Control. Whenever possible, the data report form should be read first by the Communications Officer and then given to the Data Officer(s) who should type <u>only the shaded columns</u> and send it through the chat window. Do not throw away the data report forms because you may need them later.

Part of your responsibilities is to remain calm in the face of any crisis situations. It is your duty to make sure that all the teams are focused on the incredibly important task at hand. Your work may be vital to the lives and well being of the crew of Space Station Alpha.

As a member of the STORM team, you will be receiving x-ray and proton data from the GOES-8 (Geostationary Orbiting Environmental) Satellite. Once the data is received, it will be your team's responsibility to record this data, graph it, and make calculations. You will need to predict the strength of the storm as well as how long it might last. It is your duty to communicate what you know to all other teams. In the event of an emergency, you will need to make recommendations to protect the space station and the crew. Remember, your work is vital to the space station and the astronauts on board.

Your Task

First, review the information that you studied during specialist training. Study your notes on solar weather-- especially the information on sunspots, coronal mass ejections, and solar proton events. Review the events that occurred during earlier storms when the space station encountered minor emergencies due to a coronal mass ejection.

Second, you will use your training to analyze real-time data, make calculations, graph it and make recommendations. You must monitor all changes in the solar weather patterns and report any noteworthy fluctuations to the rest of the teams. It is critical that x-ray and proton levels are

closely watched because they can have catastrophic and immediate effects on the crew and the environment of the space station.

Your Task

• Become familiar with the communication system between you and Mission Control and the verbal protocols you will use to talk with Mission Control.



Team reports plans to Mission Control.

• Create a colored-paper message system that will allow you to identify the information at each stage of the communications flow.

• Meet with team spokespersons and discuss the communications protocols and how the information will be communicated between the teams. Discuss how important it is that all numbers and data be accompanied by clear and consistent labels. Inform teams of color-code system.

• Carry out any assignments created for your team to make sure that e-Mission: Montserrat succeeds.

Communications Protocol

The job of the communication team is critical to the flow of a successful mission. The **Communications Officer** uses the microphone and the video feed for communication. Because communication in this manner is subject to technical difficulties during major weather events, all communication should also be typed into the chat window. This is the job of the **Data Officer**.

Things to keep in mind:

• The team must make sure there is a steady flow of data going from the Crisis Management Team to Mission Control.

• Data (written and oral) should be relayed every 5 minutes. If there has been a period of time where data has not been relayed, it is your responsibility to prompt your teammates for this information to send.

• All communication should be spoken first over the microphone and then typed into the chat window.

• At times it is necessary to be closer to, or further from, the microphone so the communication is clear.

• Depending on the quality of the connection, you may need to speak more slowly, or more clearly so communication is optimized.

Communications Officer Protocol

It is important to relay the information in an appropriate manner. All communication sent to Mission Control should include the proper **protocol**:

- Mission Control should be addressed as "Mission Control" or "Commander (Name)"
- Every message that is sent to Mission Control should end with "Over"

<u>Example</u>: "Mission Control, this is Operation Freedom. I have a message from the Power Team. The message is...battery capacity is at critical levels. Over"

• All messages coming from Mission Control should be acknowledged with "We copy that" or "We read you" and then "Over." This is important protocol so that we know on both ends that messages have been received.

Data Officer Protocol

It is important to relay the information in an appropriate manner. All communication sent to Mission Control should include the proper **protocol**:

- It is the job of the data officer to send all communication through chat, once it has been relayed through microphone.
- Every message sent through chat to Mission Control, should end with "over".

• All messages from Mission Control should be acknowledged with "we copy that or "we read you". This is important protocol so that we know on both ends that messages have been received.

Other commonly used messages:

• We received the last message and understand

"Copy that" "Roger" "We read you"

• You are pausing to receive a message (While waiting, there should be no extra communication)

"Ready to receive"

"Standing by"

Team Member Assigned	
To This Task	Task
	Data Recorder : Monitors real-time data for new readings and bulletins from mission control. The URL for the real-time data will be given by Mission Control at the start of the mission. May be combined with other tasks.
	Data Analysis (X-Ray Flux) : Records real-time data in data tracking tables. Conducts analyses using data tracking worksheet. Completes Report Forms every five minutes or as needed.
	Data Analysis (Proton Production) : Record data on data tracking table, make calculations, and graph data. Completes report form every five minutes.
	Data Graphing : Records real time data and projections on graphs. Uses ruler to make predictions. May be combined with Data Analysis tasks.
	Crisis Management : Makes sure all data is analyzed every five minutes. Determines priority level, whether there are any concerns, and helps team decide on any recommendations. Takes this information to the Crisis Management Team for further discussion.
	Data Runner : Gathers report forms every five minutes. Prioritizes any urgent recommendations. May be combined with Crisis Management Tasks.
	Research and Reference : Assists team in finding necessary information to make recommendations to Mission Control. Reads and understands information provided in the Reference Guide. May be combined with other tasks above.
	Reporter : Assists team in recording the situation as the mission progresses. Tracks emergencies, options, choices, successes, and areas for improvement.