Crisis Management Team Mission Day Instructions

Overview
The environment of Space Station Alpha is constantly being monitored for quality, comfort and safety. It is critical that there is always a sense of balance among all components of the environment. Any sudden change in one area, no matter how small, will certainly impact other areas in the station as well.

The role of the Crisis Management Team is to identify areas of concern and to prioritize any action items.

Your Task
One member of your team will serve as team leader. Other members of this team will be assisting the other teams (STORM, Radiation and Life Support) to identify issues and develop options. It is important that you understand the issue of time to criticality and how to read these teams' graphs.

To do their job effectively, the Crisis Management Team (CMT) should be able to answer the following questions:
1. What are the optimal levels of power to keep the station functioning?
2. Where can power be cut if need be?
3. How do the decisions the STORM, Radiation, and Life Support Teams make affect each other?
4. What resources are available in each of the space station's modules?

Mission Day Materials
- White board or chalk board that the whole class can see. Pens and eraser.
- Computer to receive real-time data about power levels
- One copy of the STORM, Radiation, and Life Support Reference guides
- Power Reference Guide
- Diagram of the space station
- 15 Blank Report Forms on colored paper to deliver to the Communications Team

Job Assignments
The following tasks must be completed during the mission. Next to each task, assign a team member.

Team Member Assigned To This Task	Task
_____	**Team Leader** • Understands all team concerns during a crisis • Asks questions of other team members to identify which teams (STORM, Radiation, and Life Support) have areas of concern and how important those concerns are • Rank orders the concerns • Updates the Mission Status Board (explained below) as necessary
_____	**Runner/ Power Specialist** • Fills out Crisis Management Team Report Forms every five minutes and takes them to the Comm Team • Monitors the real-time data for station power levels • Helps the Crisis Management Team to make decisions regarding power concerns.

STORM Team Representative
- Collects STORM Team Report Forms and delivers them to the Comm Team
- Lets the Crisis Management Team know all the concerns of the STORM team
- Develops options and recommendations to handle any problems

Life Support Team Representative
- Collects Life Support Team Report Forms and delivers them to the Comm Team
- Lets the Crisis Management Team know all the concerns of the Life Support team
- Develops options and recommendations to handle any problems

Radiation Team Representative
- Collects Radiation Team Report Forms and delivers them to the Comm Team
- Lets the Crisis Management Team know all the concerns of the Radiation team
- Develops options and recommendations to handle any problems

Flow of Communication

1. Get team reports

Team Representatives get Report Forms from their teams (STORM, Radiation and Life Support), read them and ask their teams any questions. Check that all boxes are completed. Make sure that the priority number is circled on the top.

2. Carry report forms to the Comm Team

When the Representative brings the form to the Comm Team, they should be sure that the report receives the attention it deserves. Any priority 1 messages need to be shown immediately to the Comm Officer. After turning in the report, place a check next to the correct place on the checklist that the Data Officer will have.

**3. Check in with the CMT Leader at the Mission Status Board**

It is important that the Team Representatives remember what the issues or concerns are. You will have to help the team leader update the board with your information.

4. Update the Mission Status Board/ Rank the Concerns

The Team Leader will update the Mission Status Board

based on information from the Team Representatives. The entire team should discuss the concerns and issues and determine rankings.

5. Repeat

Once ranking is completed Team Representatives return to their respective teams for the next reading while the Crisis Management Team Leader completes the Report Form and delivers it to the Communications Team.
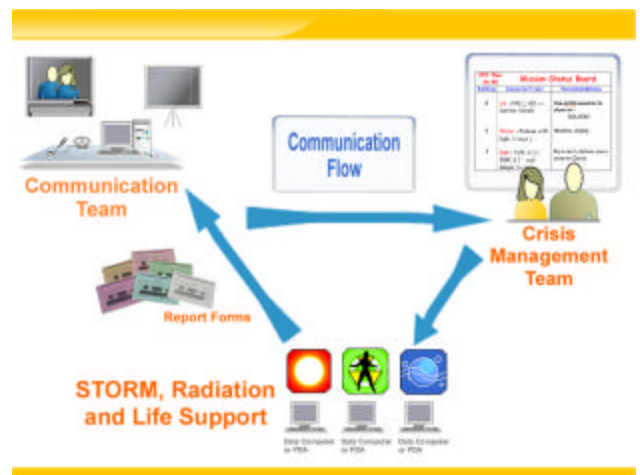
Keep in Mind

The Team Representatives are constantly moving from their data team to the Crisis Management Team and back again. They are also responsible for addressing emergencies with their data team and generating solutions during the course of the mission. It is also important that they keep their teams aware of what is occurring with the other teams and in other areas of the space station.

Instructions for the Mission Status Board

Use a dry erase board or chalkboard so that it can be constantly changed and updated. Locate the board in a central place so that all teams can see it.

Step 1: Update with any new information.

The Team Leader will update the Mission Status Board as necessary, using the information from the STORM, Life Support and Radiation Team Representatives. Try to abbreviate where you can to save time and space. Each team may have multiple concerns and possibly more than one crisis occurring simultaneously. Do not erase a concern until the crisis has been solved or if the data indicates that there is no longer any emergency.

Step 2: Rank order the Concerns or Issues.

All CMT members should work together to decide on which concerns should receive the highest preference. Rank the top three concerns, with #1 being the most urgent or life-threatening concern.

Step 3: Complete the Report Form and Take to Comm Team.

The CMT Leader or Runner should complete the Crisis Management Team Report Form and deliver it to the Communications Team.

Instructions for the Space Station Diagram

Your team will have a diagram of the space station that can either be hung on the wall or be located on the table for the Crisis Management Team. Your team is responsible for knowing what resources are located in what modules in case they need to be used to solve a crisis.

Power Concerns

Every 90 minutes the space station orbits the earth, passing into and out of the sun's direct light. The solar arrays and batteries work together to provide constant power to life support equipment and invaluable scientific experiments. The PV arrays convert solar energy into electricity for about 60 minutes of every orbit. They also recharge the nickel-hydrogen batteries. While in the earth's shadow for the remaining 30 minutes of the orbit, the batteries use about 35% of their available power. Any interruption in the charging process could leave the station without enough electricity during this "eclipse" period.

As a member of the Crisis Management Team, you will be responsible for monitoring the power of the space station, determining the power load on the systems, and making recommendations to Mission Control. Battery power levels necessary for life support should not fall below 50% capacity while the station is in the earth's shadow.

Crisis Management Team Report Form

UTC _____   **Mission Status**

	Rank	Concerns/Issues	Recommendations
Power			
Life Support			
Radiation			
STORM			

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	Rank	Concerns/Issues	Recommendations
Power			
Life Support			
Radiation			
STORM			