Vanessa Bente
November 2nd, 2016
Model United Nations
Apollo 13 - Crisis Committee

The 13th mission to the moon was launched two days ago at 1:13 p.m on April 11 at the Kennedy Space Center in Florida. Today there has been a malfunction that severely damaged the spacecraft. An oxygen tank in the Service Module has exploded, and the crew is slowly losing oxygen and producing more carbon dioxide by the minute.

My name is John Young and I am the backup spacecraft commander for Apollo 13. I graduated from Georgia Institute of Technology in 1952 with a bachelor of science degree in aeronautical engineering. After graduating, I entered in the United States Navy. I served on the west coast in the Korean War, and then was sent to flight training where I was flying Cougars and Crusaders. In 1962 I was selected as an astronaut, and my first flight was with Gus Grissom in Gemini 3 in 1965. I have a lot of experience in flight, and now my fellow crew mates are stuck in space, running out of time to save themselves. Here from Earth, NASA can save them by applying our knowledge of the modules and try and help them return to Earth before running out of oxygen.

In my opinion this mission was rushed. They prepared the crew six months prior to launch, however there is usually much more time for planning and testing. Also, due to the fact that the United States (NASA) had already beaten the Russian's to the moon in Apollo 11, this exploration to the moon could have been less watched, and less prepared as the other missions before. The explosion has occurred due to a malfunction in the stirring of the contents in the tanks, which may have been bad luck, however also human error. The hydrogen and oxygen are liquified in pressurized tanks by keeping them at very cool temperatures. However, having these liquified substances is an issue because the temperature inside the pressurized tanks are not equal (the liquid at the top is not the same temperature as the liquid at the bottom). Due to this stratification, it is important to consistently keep the substances moving by stirring the contents with fans (destratify the substances), especially for oxygen.

In this case where the tanks are slowly loosing oxygen and hydrogen, it is extremely controversial to the entirety of the spacecraft. These tanks not only supply the oxygen for breathing, but also the drinking water and power for all of the electronic systems. It is important to know which systems are noncritical and worth shutting off, in order to maintain enough oxygen and hydrogen to return back to Earth.

From my own research I found that the 2nd oxygen tank (10024X-TA0009), was installed in the service module of Apollo 10, but was taken out for modification and was mangled in the process. Apparently the tank was tested, fixed, and installed in the Apollo 13 service module. Reusing a damaged piece of equipment does not uphold the standard that NASA has made for itself (being not only the first organization to land on the moon, but the best in the World).

In this case where there has been a malfunction in space, it is hard to determine what to show to the media. Keeping the information away from the press could prevent further help and discoveries, but in the case of a failed mission, NASA could be shut down due to safety regulations. I believe families should be noticed about any malfunctions during the mission, as well as the major press. At a point where it is life or death, everyone should be notified for extra help and problem solving solutions. After Apollo 11, the Russians were jealous and insulted by the US's capability to land on the Moon, therefore resulting in pressure from the Russians on the Americans to maintain their standard of having the best technology in the world. Keeping the information of the malfunction away from the Russians would benefit us in the long run, denying the Russians to feel more powerful than us.

Overall, our main priority is to save the crew in the Apollo 13 mission as a team and determine what ways we can go around the issues to come.

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