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## Engineering Ethics

In my opinion, there is nothing more valuable than integrity and honesty in the work that we do. No job is shameful or degrading if you are doing the right thing and learning how to better yourself from mistakes. Engineering Ethics is a code that chose to live by and follow. It states that we as Engineers will be honest and follow a moral code that will protect us a person and everyone in the world including clients our family members. I think that the engineering code of ethics should never stop being stressed. The lives of everyone in the world depends on the integrity of us; the engineers. Technology is what is making the world spin in shorter terms, so why not respect its importance and do the right thing? To further my knowledge on the code I just did some research on the disaster of the space shuttle Colombia in 2003 and analyzed some key points.

Reading the events, the communication between engineers on earth, and the brave astronauts doomed to disaster made wonder why more was not done to prevent the issue. April 12, 1981 was the glorious day of the first flight. Sadly, as soon as the space shuttle took off, a piece of foam insulation broke off and dug into space craft due to its high velocity and fierce power. My questions regarding the engineers are:

- If it is a recurring issue (foam flying off) why keep using it? Why not find another method to seal the spacecraft or find a way to stop it from breaking off the space craft?

- Why was there no remedy provided for in space repairs? By this I mean, why was there no plan b just in case an accident like this occurred in space?
- When discussing the situation with the astronauts, the issue was in a way disregarded. Knowing that any imperfection can impact how the space shuttle functions when returning into space, why would the engineers label the issue as a turnaround for maintenance instead of a flight safety issue?
- Why did it take them so long to come up with a solution when those lives were waiting in space?
- Why think about money issues when so many lives were in danger?

All these questions are recurring in my head and I cannot answer them except by pointing out the flaws in the engineering ethics. Maybe nothing they could have done would have saved the astronauts, but why not try harder? Something I realized was that the pressure of completing assignments on time and the pressure of being the best and surpassing another company is what make us set our ethics aside.

The time pressure to send the space shuttle into orbit, the poor risk assessment and the failures of responsibility were all major issues that led to the accident. If more tests were performed instead of worrying about time, the foam issued could have been resolved. NASA knew it was an issue because of previous experiments. Poor risk assessment was taken because the issue was severe and not much was done to solve the situation. Finally failure of responsibility was a major issue because the astronauts made their concerns visible to the engineering crew but they never marked it as a flight safety issue.

The code of ethics is crucial and many lives rest on our hands. I believe everything we can do must be done because we can change the world to a better place if we all do our part.