

# Ethics in engineering

## 10541

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In the disaster of the Hyatt Regency a lot of things were done ethnically wrong. Their process ignored a lot of codes that each is responsible to fulfill in their certain profession. The engineers are ultimately responsible when it comes down to checking the safety of the final designs of their designs of the object that they are building or designing. An engineer's first priority of their design is the welfare of the public. You must be totally sure that person of the public will not be harmed in anyway. This can not be affected by outside sources such as political or social pressure. If an engineer feels the slightest doubt in what he/she is processing then he/she must not follow through with the project until he/she is satisfied.

The engineer is responsible for the building codes being safe for the public to use without harm. This means that they must be totally sure that their design is up to the ethics that an engineer must follow to be able to keep his privilege of practicing engineering. The fabricator must use materials that he/she feels meets or preferably accedes the standard safety requirements of the project. The owner or employer must not use sources of pressure, such as money or political power, to speed up the process due to the fact that this might cause great harm to members of the public. Also the owner must not "cut corners" to save money or add personal benefit. These responsibilities must be met for every project when regarding building codes.

Professional agencies of engineering may step into any project if they are notified or suspect that a project is not built to the ethics that it should be. They may do many things once they intervene or review the project. They may stop the project for further review or corrections. If an engineer has drastically broken the code of engineering the agency may revoke or

recommend that the engineer's privilege of practicing engineering be terminated. This makes engineers well aware that they must follow all the guidelines that an engineer must follow to continue their practice.

My opinion did not change from the reading or other activities about this case. I believed that the engineers were at fault the whole way. They did not follow through with their code of ethics. I put the blame on their shoulders.

### The Challenger

The engineers of the challenger did not all agree that the flight was safe to follow through with. The implied social contract of professionals states that all engineers must respect another engineer's decision or recommendation when it comes down to the safety of the public. In this situation there was a breach of ethic contract such that the engineers that did not want the launch to take place was either thrown out or ignored. This can not happen because the person who has the most " power" can basically do what ever they feel is right without taking others opinions into effect.

The engineers that went along with the launch did not put the public's welfare into the highest account. Therefore their main responsibility, the welfare of the public, was neglected. An engineer must stand by this responsibility no matter if they feel that their opinion might put their job into jeopardy.

NASA should have listen to the opinions of all the engineers. If there is a discrepancy between them they must " play it safe". This must be done to make sure that there is no doubt that the members of all people involved in

the situation is at serious risk of their life or injury. Also they should have not allowed the pressure of the government and the pressure of social reasons put an influence on the decision of the launch.

My opinion changed after I read the section in the book on the ethics of engineers. At first I believed that the blame should not have been on the engineers as much as the board members of NASA. After reading the chapter I put the blame on the engineers that did not stand up to their feelings of the launch that they should have felt; that the welfare of the members of the launch might be in jeopardy.