## **Ethics Essay**

Engineers in our time end up working on and designing different devices and contraptions that affect a wide range of people. On top of that, these engineering feats become increasingly better and allow for society to go through major changes. The products of these designs, though, can be extremely dangerous if the proper precautions aren't taken. Examples of this is similar to an aircraft having no features to decrease the chance of casualties in an accident, or a car not meeting certain criteria accepted as the standard at the time of manufacturing. In both these cases, if engineers don't do their job right then it will cost something that is arguably the most valuable thing we have: human life. That is why a "Code of Ethics" exists for engineers and most other disciplines as well. It is a set of rules that are meant to guide people in the general path of making sure they ethically do their job and don't compromise some core values that everyone should have. Looking at the IEEE code of ethics, it is clear that the rules are set to enforce a priority on human life and incorruptible members of a group that is tasked with anything that may be used by others.

When faced with an ethical situation, it is important to take a step back and look at what the consequences of your choice will be. Making the right and ethical decision is not always a black or white decision, so it can't be a choice made in haste or without any thought. My first thoughts are on the "who", "how many", and "how" that each choice will affect. It is important to be able to visualize a worst-case scenario and to put yourself in that case to see how you might feel. That is how I make decisions in these situations, by putting myself in the future of each choice's worst-case scenario and seeing how I feel about where I am and what is going on. This is somewhat what I was thinking about during our class discussion about Ford and the "Pinto" situation in the 1970s. During that time Ford was rolling out a new car, the Pinto. During testing they found that rear collisions above 20mph could cause the gas tank to be punctured leading to a fire or explosion. At the time, the 20mph limit met the standards, but a new standard was being discussed, that at 30mph. They ended up not fixing the issue and producing the cars, and when word got out, they decided to take their chances with legal fees rather than recall and fix the vehicles. This is because the legal cost would be lower than anything else, based on. In the shoes of someone on the team, I would think of the repercussion of having to live with the fact that a design I was a part of, that had a known issue, had caused loss in human life. During the discussion it seemed everybody shared the view that the company could've done more to meet some ethical standard. It was interesting to hear one person's argument though, who said that based on the in class sheet it seemed that ford met all the federally set standards at the time, but not the proposed standards that were in review to be set at a later time. Generally speaking, though, we all agreed that the best choice would have been to scrap the design from the beginning or modify it after their initial tests made the problem known. That would have cost less than both the legal fees and the recall, but it would delay pushing out a new vehicle.

Ethics can also be thought of as possessing a set of virtues. The ones talked about in the course are integrity, honesty, fidelity, charity, responsibility and self-discipline. Trying to relate these to the scenario discussed in class, I would highlight integrity, honesty and responsibility as the three bigger virtues that should be talked about in this case. The integrity of the people in the whole hierarchy of the "Pinto" situation should be called into question, since they completely abandoned the judgement they had in their respective fields, for financial benefit. They all sought to see the car model released and sold rather than taking some time to look into an issue that they were aware of that would cost them financially. Honesty is another big part. The people in charge of testing the vehicle weren't honest about the severity of the issue, and that dishonesty propagated throughout the company. Some could argue that they were dishonest to the public as well, since people that bought the car before news got out were buying a car that as far as they knew had no major issues with safety. Finally, responsibility is another virtue that was tested here. Obviously, everyone involved had varying degrees of responsibility on the matter, but in the end it doesn't seem like anyone was held accountable, which makes it hard to believe that the individuals involved recognized that they had an obligation to act in the interest of others rather than themselves. While the other virtues are just as important on general terms, each decision will test different aspects of Ethics and so, different ethical virtues. In the Ford case, I believe these 3 to be the most important.