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Chapter 9.1a

An Unethical Decision:

Space Shuttle Challenger, Mission 51-L

The Challenger Shuttle is known for exploding shortly after launch. However, what might not be so known is what caused the accident. The Challenger labeled mission 51-L, had a few contributing factors which led to its demise. Ultimately, the investigation panel found that poor communications, negligent final decisions, and cold air temperatures is what led to the failure. So, why didn't NASA's safety procedures discover potential danger?

On January 28, 1986, at Kennedy Space Center in Cape Canaveral, Florida, the ambient temperature was 36° Fahrenheit, which was 15° colder than any previous launch. This being a contributing factor that could not have been detected in NASA's safety procedures. NASA's safety procedures did not detect the problems because of the contracted firm MTI's (Morton Thiokol Inc.) flip-flopped response. MTI built the solid-rocket motors and managers on a teleconference the night before the launch chose to ignore the engineers.

At first, MTI stated that it would not be safe to launch due to cold temperatures on the Cape that could affect the performance of the solid-rockets. During a break in the teleconference MTI managers pushed engineers out of the conference room and commenced again. Head managers at MTI then explained to NASA that the cold temperature will not affect the O-rings performance; concluding that the pressure of the accelerant forces the O-ring to press into place. The managers at MTI made their decision fully aware of the truth. Consequently, the Challenger and its crew members were compromised because of the unethical decision made at MTI.

The decision made by MTI managers, and cold temperatures mixed together to create an anomaly. In conclusion, the safety board employed by NASA never could have identified the problem. Ultimately, the explosion happened, which helped identify holes in the safety procedures. Sadly, accidents help to create change to well thought-out professional procedures.