## **A Heating Unit Defect**

Jack Wang is a young, single engineer who graduated from college about two years ago. Since then he has been employed by the Kitten Manufacturing Company. His most recent assignment, which began four months ago, is to work on the development project of a part which is to be integrated into a new electric heating unit the company is planning to market mainly to young people living in small apartments. Wang is happy in his work, since he likes and respects his coworkers. His home life is more troublesome, since he lives with his elderly parents who largely depend on him to take care of them, since his father is unable to work due to a debilitating disease and his mother is in a permanently depressed state because of this.

Wang's work on the project goes on schedule, although he is under some pressure to complete his part of the project, until one day his testing of the part shows that it will fail within the first 2000 hours of service in about one out of thousand units in which it is to be installed. Failure of the part could possibly cause overheating of the unit and start a fire. Further testing shows him that in order to correct the defect he will need to basically start his work over from the beginning. Naturally upset by this finding, he reports it to his supervisor, John Lu. As usual, Lu is sympathetic to the young engineer, but when Wang asks for extra time he is told in no uncertain terms that the part must be ready on schedule. Lu has been told by the management of Kitten that it is essential that the heater be available on the scheduled date since it has been learned from an informant that a rival heating unit will be available from the company's prime competitor about a month after Kitten's scheduled launch of its own unit. Lu also tells Wang confidentially that Kitten is in some financial difficulties, although this information is currently to be kept from the employees.

When Wang continues to express his concerns, Lu assures him that he will personally see to it that corrective action will be taken later. He will insist to management, at the possible price of his job, that the part be redesigned and that already sold heating units be recalled. He tells Wang that in terms of the big picture this is the most cost effective way to handle the situation. Plus, he tells the young engineer, it is likely that most of the units will be recalled before any problems arise, since the units are likely to be used less than 2000 hours during an entire heating season and the recall should occur within six months.