The case for Fail Safe Mechanisms

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Abstract

With advancement of technology life has become complex and redefinition of what is luxury and what is not luxury. Fuzzy. Examples are colour TV, mobile phones etc. Even in families and households below poverty line these white goods find presence. Consequently it is not confined to advanced technologies, the need for fail safe system. It is important to innovate fail safe systems in every technological environment. One of the early control mechanism is the fuse wire in an electrical network which has given way to trip switches. It is unfortunate that in spite of these advancement a house wife who was using an electric iron was electrocuted and the baby who was put to sleep and crawling on waking up to touch the mother also got electrocuted. Needless to say absence of proper fuse, earthing or tripping mechanism invited the calamity. At the other end of the spectrum is the burn out of Columbia on re entering into earth's atmosphere all because of a foam piece separating and falling on the heat shield and creating a crack. This paper drives home the importance of failsafe systems sto effective robust control mechanisms i.e. "meet the purpose and not fail to meet the purpose" which has been echoed in the statement "we need to have a high level of expectation that things will work the way we expect them to work" in the lead statement to the World Standards Day Message of 14th Oct 2011 by the Presidents of IEC. ISO and ITU.

Keywords: Fail safe mechanisms, Design elegance, Fail safe controls, Product quality, Process quality, Procedure quality, Value driven design.

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