

INCOSE SA Gauteng Event of 15 April 2015

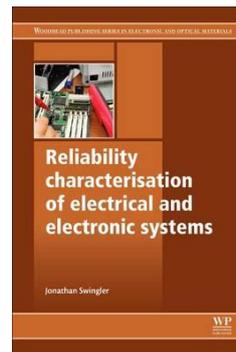
Reliability and stupidity: common mistakes in reliability engineering

By Jonnro Erasmus Pr.Eng. ASEP



When we planned the INCOSE SA events for the year, we were concerned about April. With the numerous public holidays, April is almost as unproductive as December in South Africa. Imagine our surprise when 82 people confirmed their attendance. A quick count revealed that 76 people showed up, which is a remarkable turnout. It must have had something to do with the presenter.

Albertyn Barnard is always a popular presenter, due to his offbeat humour and deep knowledge of the field of reliability engineering. For this talk, he decided to share with us some of the insight he captured in a chapter titled *“Reliability and stupidity: mistakes in reliability engineering and how to avoid them”* in *Reliability Characterisation of Electrical and Electronic Systems* (Woodhead Publishing, 2015).



This presentation started with a concise discussion on the history, objectives and practice of reliability engineering, and continued to identify and discuss several mistakes frequently made by engineers. The discipline of reliability engineering, which developed rapidly after the Second World War, has not kept pace with modern technology. Many reliability engineering activities practised today are outdated, misleading, or even fundamentally flawed. This may result in the execution of activities which cannot contribute to the primary objective of reliability engineering, which is the prevention of failure. Furthermore, other useful activities are often omitted from product development processes, which may increase the risk of releasing products and systems with inferior reliability.

Our president René presented Albertyn with a good bottle of wine to thank him for the excellent presentation. In a surprising twist, Albertyn then countered with an even better bottle to thank René for his ongoing dedication and tremendous effort for INCOSE SA. I will take this opportunity to thank both of them for all the energy put into this association.



Judging by the amount of discussion afterwards, the presentation certainly asked the right questions. Perhaps even more indicative was the record amount of wine consumed. I shall leave it up to you to interpret it, but please join us for the next Gauteng Branch Meeting on 24 June, where Beuwen Gerrits from the Department of Science and Technology will be presenting.