



EEEVic Lecture organised by the IEEE Society on Social Implications of Technology

Surviving Engineering Disasters – Notes from the Field.

Tim Cousins MEI CFEI

Where: Auditorium, Engineers Australia Building
21 Bedford Street, North Melbourne

When: Monday 16th October, 6:00pm refreshments for 6:30 pm lecture.

Admission: Free, all welcome.

WHAT IS IT ABOUT?

The investigation and decision making process involved in the rebuilding after a technology-related disaster involves much more than repairing technology. The human and social elements (“symbolic” damage) of a disaster must be addressed. If not, a second impact will be felt, typically six weeks after the disaster, which can threaten the reputation, if not the employment status of the engineer working to recover the disaster.

Distinguishing between physical damage and symbolic damage has important implications for understanding the way in which affected organizations will mobilise to defend themselves. If the damage is only physical, then the solution is usually simple - affect a physical repair. The communications are generally simple, concrete and direct. If, however, the symbolic belief systems of affected organizations are disrupted, then a range of psychological defences will come into play that can significantly impact on the judgment of the affected individuals. This often diverts the course of the physical recovery.

The presentation will be a distillation of real life experiences drawn from the presenters personal experience with over 1,500 different engineering systems disasters, including a \$90M power station fire and \$30M data centre contamination incident.

The SSIT is presenting this talk as part of a series examining the social issues that surround technology.

TIM COUSINS

Tim Cousins is an Engineering Systems Failure Analyst and Disaster Recovery Consultant working primarily in the insurance industry since 1990. His work is principally divided into three different but complimentary streams.

The first stream, Engineering Systems Failure Analysis, involves technical investigations into the cause of failures within Engineering Systems principally involving electrical, electronic and computer systems. Some of these failures develop into fires.

The second stream involves the Recovery of Organizations following an incident, crisis or disaster: establishing the resultant nature and extent of damage, and providing consulting assistance with the management of repairs and recoveries.

The third and latest stream, Risk Management for Medical Research, is a specialty service using his failure analysis and disaster recovery experience as a practical base.

Tim has worked with specialist engineers and chemists over a wide range of engineering systems primarily involving electrical, electronic and computer equipment. The type of system extends from simple computer systems through process control systems to robotics, telecommunications systems, data centres and power stations. Last year he conducted failure investigations and technical audits in the USA, Philippines, Indonesia, Malaysia, Singapore and Vietnam.

Tim is a member of the IEEE Society on Social Implications of Technology.

WHAT ELSE SHOULD I KNOW?

The IEEE is a voluntary organisation with more than 350,000 members. The SSIT has about 2000 members in 56 countries worldwide and growing. The Society focuses on the impact of technology on society, including both positive and negative effects, the impact of society on the engineering profession, the history of the societal aspects of electrotechnology, and professional, social and economic responsibility in the practice of engineering and its related technology. SSIT publishes a quarterly journal, IEEE Technology and Society Magazine (free with your Membership), and sponsors periodic conferences entitled The International Symposium on Technology and Society (ISTAS).

SSIT

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