



## Dr. Andrew O'Connor

### PSAM12 Speaker Bio

### Director, Relken Engineering Pty Ltd

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**Short Statement:** Primary author

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#### BIOGRAPHY

Dr. Andrew O'Connor is a Reliability Engineering, Risk and Logistic specialist with over 16 years' experience in the Defense, mining, transport and nuclear sectors.

Andrew's interests include modelling complex risk scenarios, the analysis of data from enterprise asset management systems, and providing informed asset management decisions.

Andrew has worked in all facets of logistic and maintenance support including managing and maintaining complex equipment, logistic planning, technical regulation compliance, fleet management decision support, acquisition engineering product reviews and led maintenance and engineering teams. Through an extensive career in the Australian Army, Andrew held appointments such as the design and maintenance authority (DAAR/MAAR) in Iraq and Afghanistan, commander of numerous maintenance elements, technical regulatory engineer and for 3 years, Andrew led the Reliability Availability and Maintainability Centre of Expertise for the Australian Army. In 2009, Andrew was awarded the Director General of Land Engineering Award for his analysis into the supportability and capital replacement program of the ASLAV family of vehicles. In 2011, Andrew, along with other Reliability Engineers, started a consulting company specializing in risk, reliability and maintenance.



Andrew has managed the introduction into service of numerous complex equipment through the conduct of Logistic Support Analysis products, and reliability assurance and test programs for military vehicles and weapon systems, secure communication equipment, underground coal mining and public rail projects. Andrew has also used the data contained in Computer Maintenance Management Systems to inform fleet management decisions and optimize maintenance in helicopter, maritime and heavy vehicle applications.

Andrew is the author of "Probability Distributions Used in Reliability Engineering" (ISBN:1-933904-06-2) published by the RIAC is used as a supplemental reference book in courses offered by the University of Maryland. It provides graphical visualisation, closed form formulas, examples and explanations on how 22 probability distributions are used within reliability and risk engineering. Andrew is also a reviewer for technical submissions to the journal of the American Society of Quality and the International Journal of Quality, Statistics and Reliability.

Andrew completed a PhD from the Centre for Reliability and Risk at the University of Maryland in the USA, completing research using Bayesian Networks to conduct qualitative risk assessments for nuclear power plants. He is a Certified Reliability Engineer from the American Society of Quality and a Member of Engineers Australia.